

October 2006

# Tracker

Measures of Departmental Performance



Missouri Department of  
Transportation



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# Greetings from MoDOT

The Missouri Department of Transportation is committed to being open and transparent. We want you to know what we do well, what we don't do so well and what we are doing to get better. That is why we created the Tracker.

This document is your window into MoDOT – warts and all. It invites you to hold us accountable for exceeding your expectations. You expect MoDOT to get the best value out of every dollar spent. You expect us to make highways smoother and safer, soon. You expect us to fix bad bridges, be responsive and to proactively give you the information you need. You expect us to provide a world-class transportation experience.

We share your expectations and have built 18 tangible results around them. These results guide us everyday as we go about the business of delighting our customers. In the Tracker, you will see that we have established measures to gauge our progress and we are comparing ourselves to the best organizations in the country.

You can use the Tracker to see how we are measuring up. We make it available in a printed format and on our website at [www.modot.org](http://www.modot.org). Missouri's transportation system will not improve unless we all work together. The Tracker is one of the many ways you can help. Please look it over and let us know how we are doing.

Sincerely,



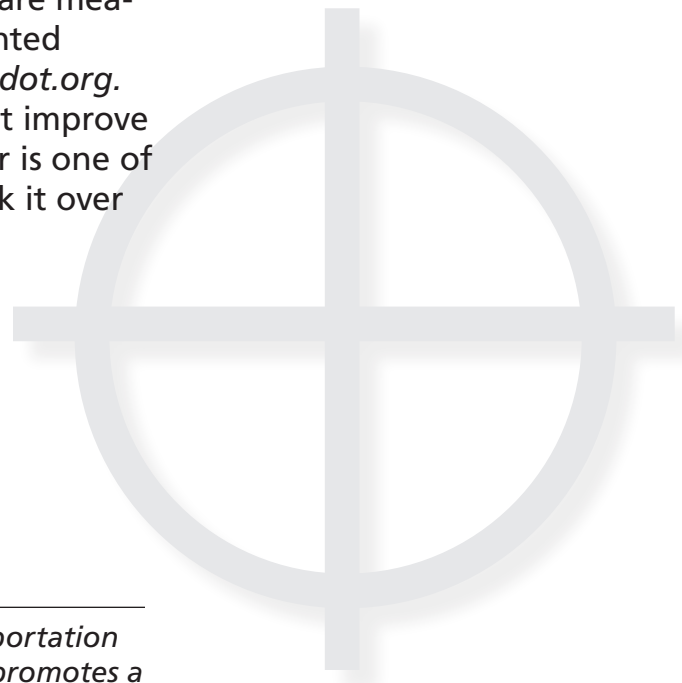
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## **Mission**

*Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.*



Pete K. Rahn, Director  
Missouri Department of  
Transportation



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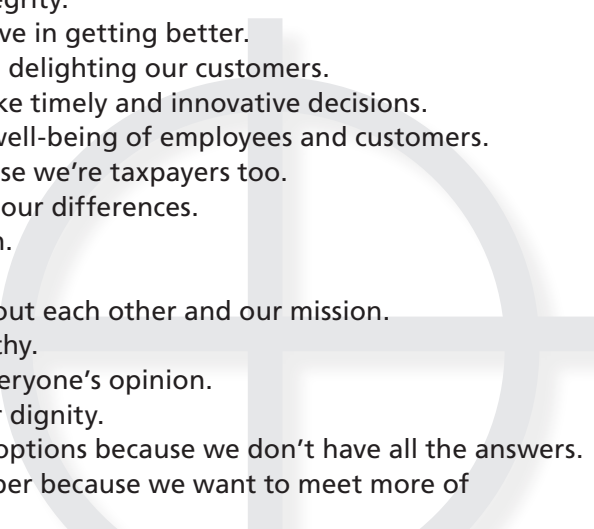
# Tangible Results

- Uninterrupted Traffic Flow
- Smooth and Unrestricted Roads and Bridges
- Safe Transportation System
- Roadway Visibility
- Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)
- Partner With Others to Deliver Transportation Services
- Leverage Transportation to Advance Economic Development
- Innovative Transportation Solutions
- Fast Projects That Are of Great Value
- Environmentally Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices
- Customer Involvement in Transportation Decision-Making
- Convenient, Clean and Safe Roadside Accommodations
- Best Value for Every Dollar Spent
- Attractive Roadsides
- Advocate for Transportation Issues
- Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

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# Value Statements

MoDOT will -

- support and develop employees because we believe they are the key to our success.
  - be flexible because we believe one size does not fit all.
  - honor our commitments because we believe in integrity.
  - encourage risk and accept failure because we believe in getting better.
  - be responsive and courteous because we believe in delighting our customers.
  - empower employees because we trust them to make timely and innovative decisions.
  - not compromise safety because we believe in the well-being of employees and customers.
  - provide the best value for every dollar spent because we're taxpayers too.
  - value diversity because we believe in the power of our differences.
  - be one team because we all share the same mission.
  - use teamwork because it produces the best results.
  - foster an enjoyable workplace because we care about each other and our mission.
  - be open and honest because we must be trustworthy.
  - listen and seek to understand because we value everyone's opinion.
  - treat everyone with respect because we value their dignity.
  - seek out and welcome any idea that increases our options because we don't have all the answers.
  - always strive to do our job better, faster, and cheaper because we want to meet more of Missouri's needs.
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**Please Note:** Tangible Results are listed in reverse alphabetical order, not by importance.

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# Uninterrupted Traffic Flow

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Missouri drivers expect to get to their destinations on time, without delays. Traffic, changes in weather, work zones and highway incidents can all impact their travel. MoDOT works to ensure that motorists travel as efficiently as possible on the state system by better managing work zones, snow removal and highway incidents, and by using the latest technology to inform motorists of possible delays and available options. Better traffic flow means fewer crashes.



## Uninterrupted Traffic Flow

### *Average speeds on selected roadway sections*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Eileen Rackers, State Traffic Engineer

**Purpose of the Measure:**

This measure tracks average speeds on various roadway sections. The desired trend is for the average speed to approach the posted speed limit.

**Measurement and Data Collection:**

Data from the St. Louis area is provided through our partnership with [www.Traffic.com](http://www.Traffic.com). They have installed traffic sensors along five routes in the St. Louis metropolitan area to help monitor traffic conditions. This data is reported for weekdays only, to better represent peak traffic conditions, and is consistent with Kansas City's reporting. The data from St. Louis is for large sections of roadway, while Kansas City and statewide data are shown at specific sensor locations.

**Improvement Status:**

Statewide:

Average speeds in all but one location meet or exceed the past years' averages. The location on Interstate-35 in Daviess County is experiencing construction that began in July. To help improve average speeds, live traffic data for three Missouri metro areas is available on MoDOT's Web site at [www.Modot.org](http://www.Modot.org) in the services section under traveler services. Kansas City Scout provides traffic information for Kansas City, Gateway Guide provides traffic information for St. Louis and Ozarks Traffic provides traffic information for Springfield. MoDOT's Web site also provides a work zone map.

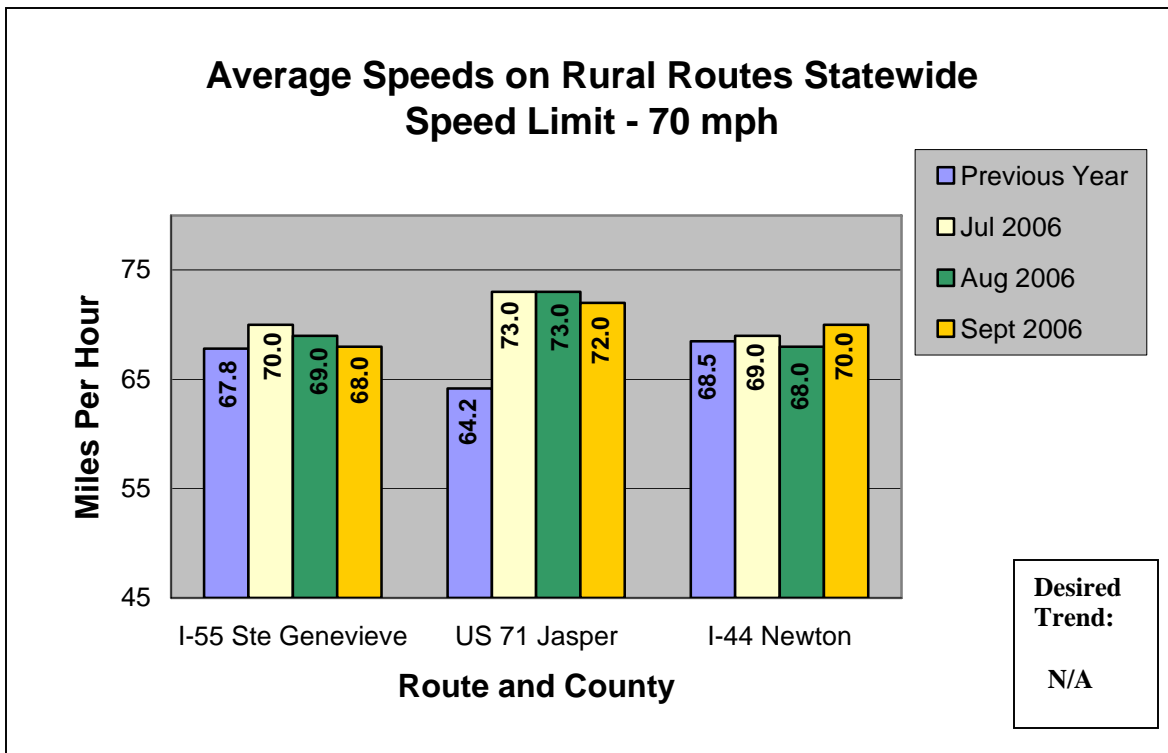
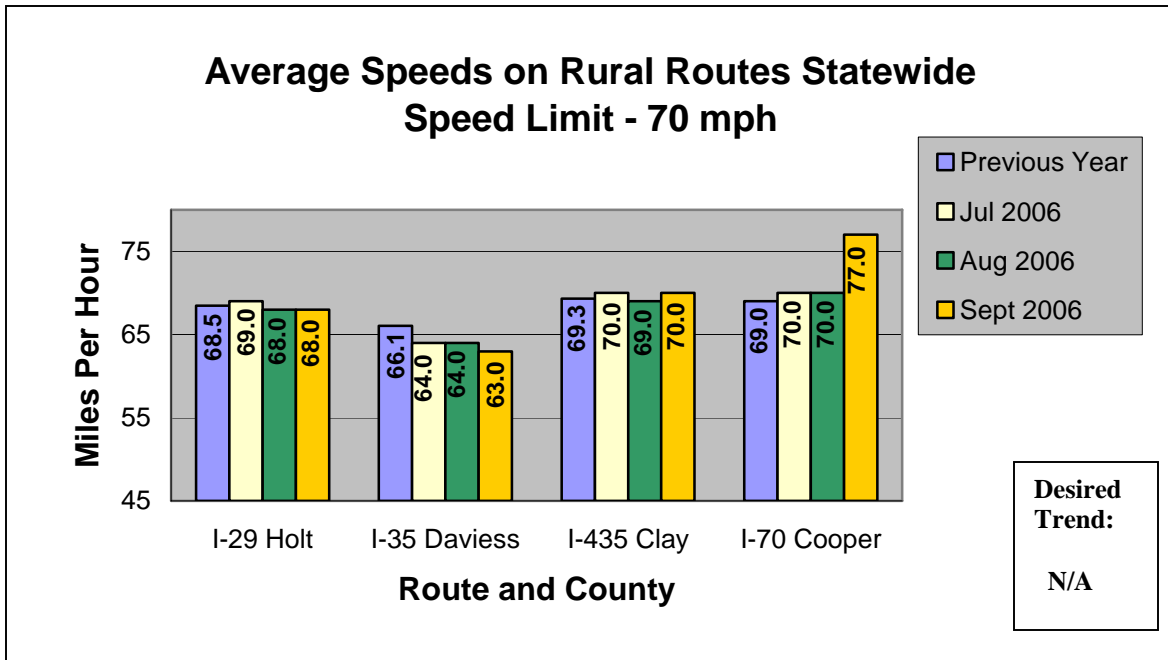
St. Louis:

Generically the average speeds are steady to slightly higher as compared to the previous quarter and are relatively close to the posted speed limits. Afternoon traffic continues to be slower due to increased traffic volumes.

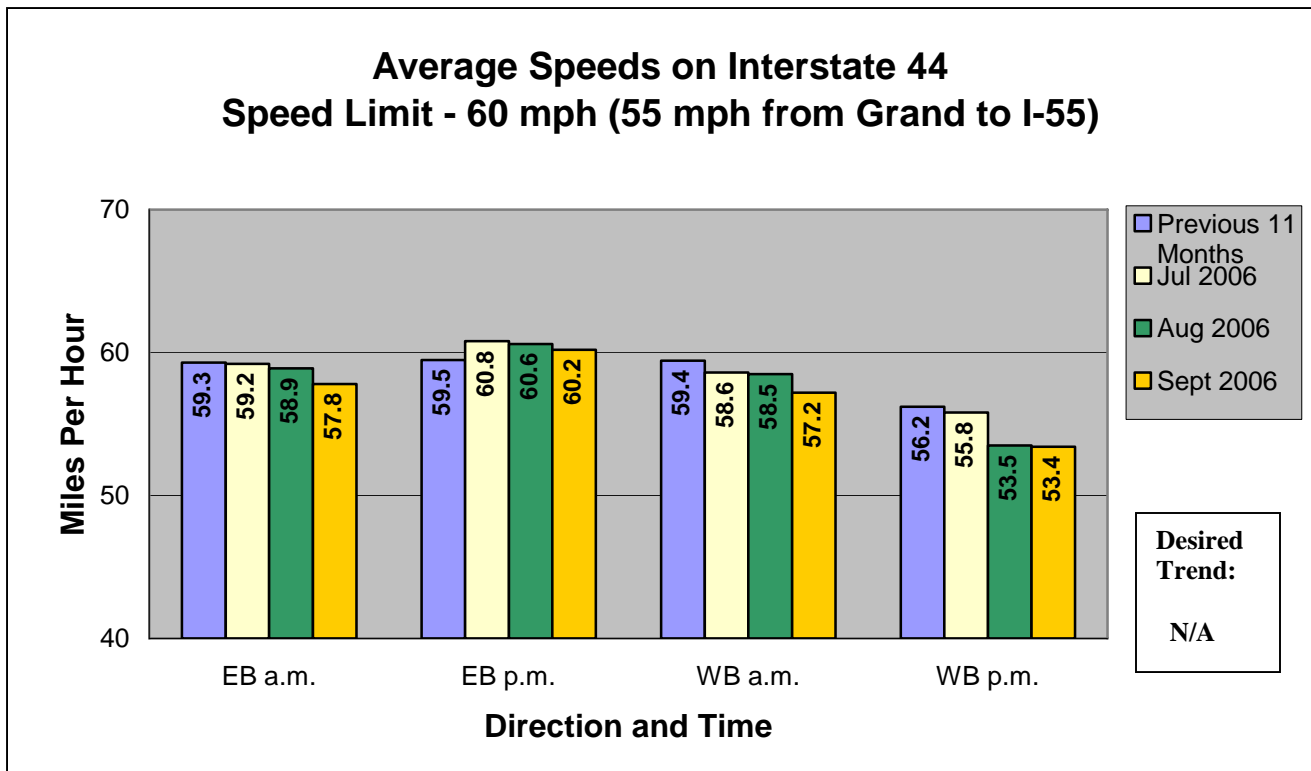
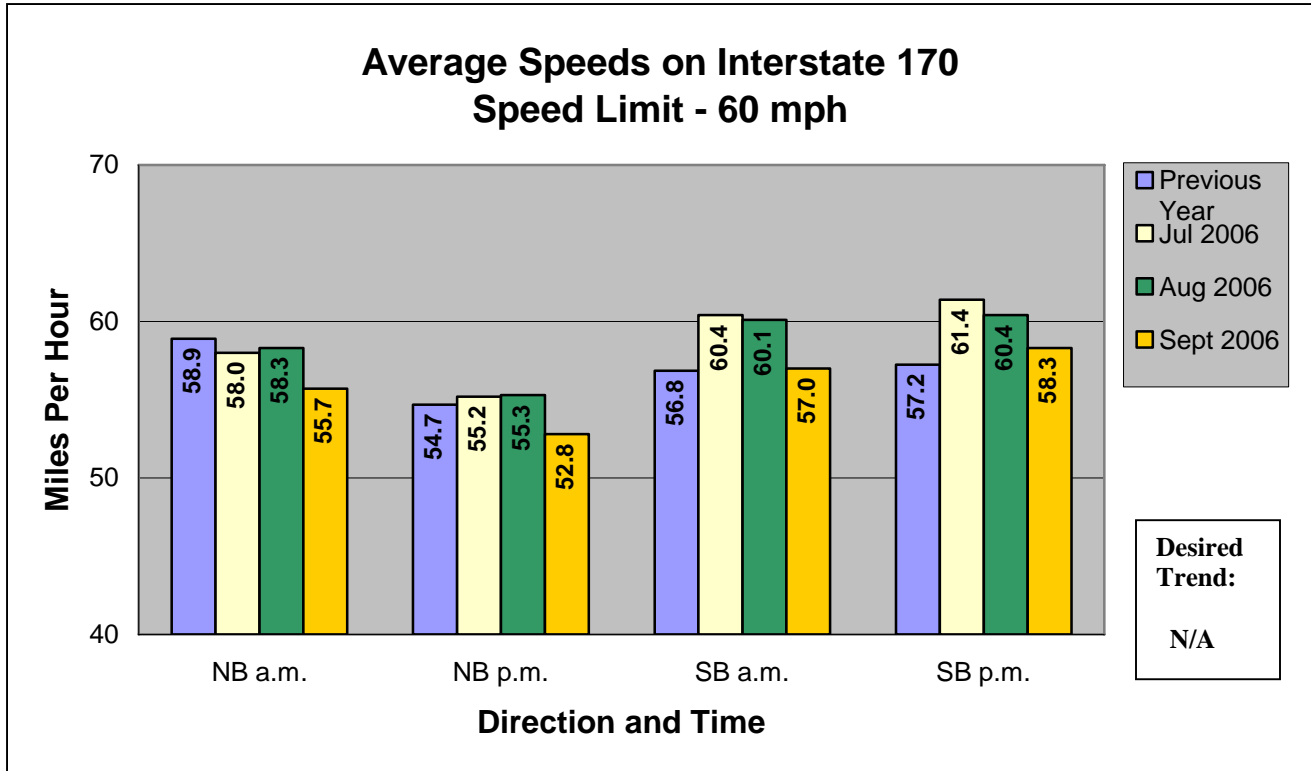
Kansas City:

In Kansas City, eastbound Interstate 435 at 104th Street improvements are the product of a third lane that opened this past summer. The I-35 Paseo Bridge at Armour road is experiencing higher than normal traffic volumes due to the I-435 and I-635 Missouri River bridges each having one lane closed. I-35 at 27<sup>th</sup> Street is being impacted by the staged bridge rehabilitation of 13 bridges just to the north. Fluctuations in the peak hour speeds are due to the various lane closures throughout the construction season. This construction is scheduled for completion by the end of this year.

## STATEWIDE

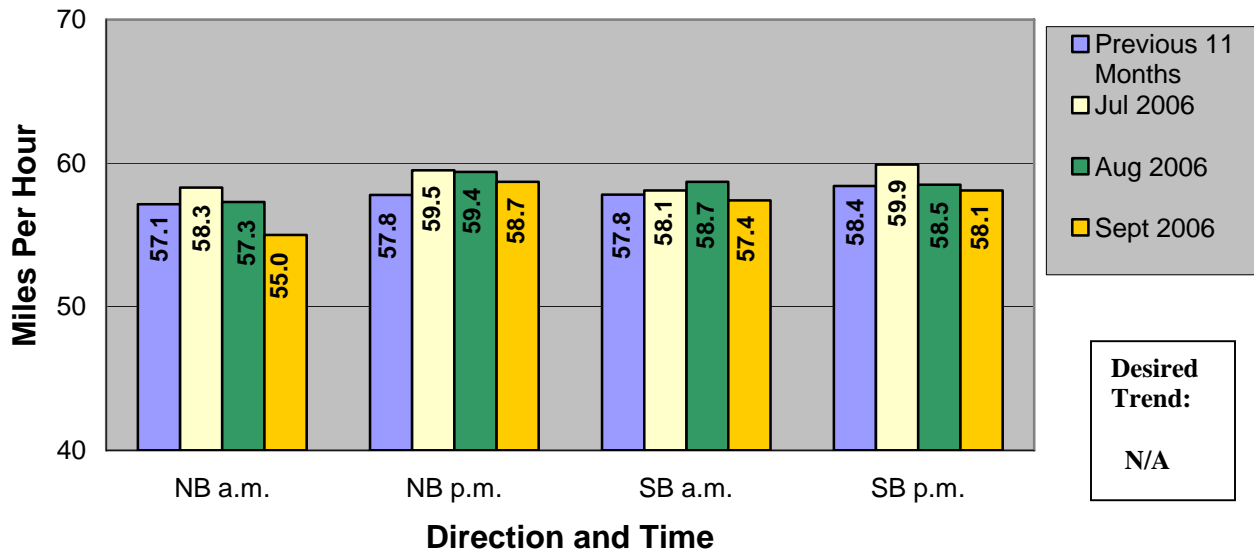


## ST. LOUIS

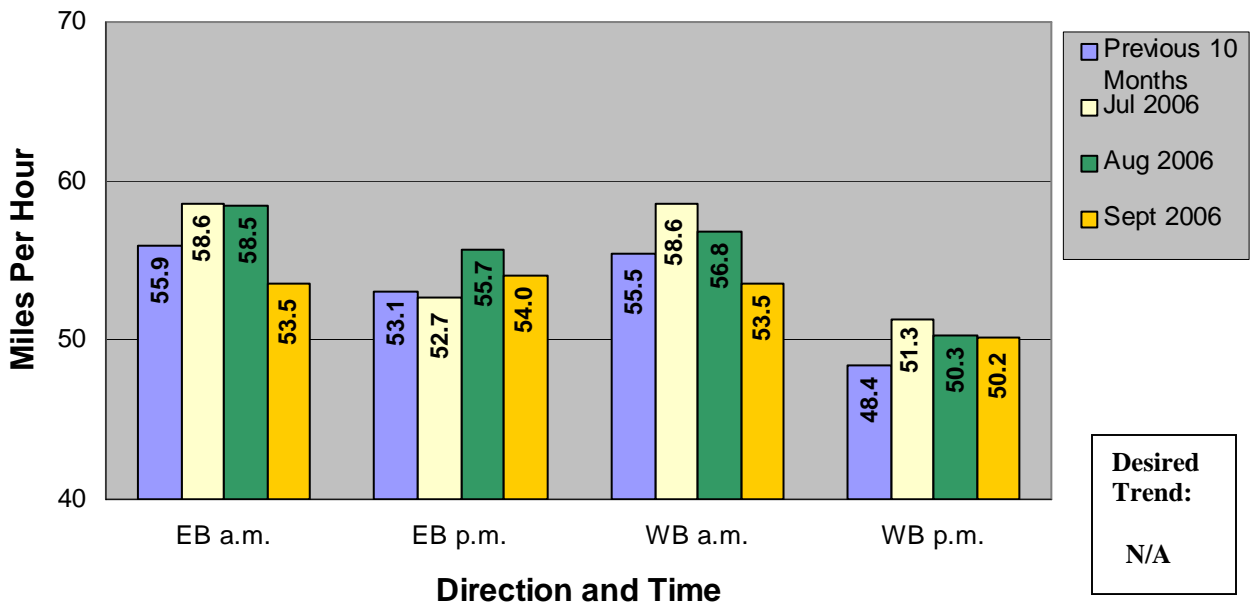


## ST. LOUIS

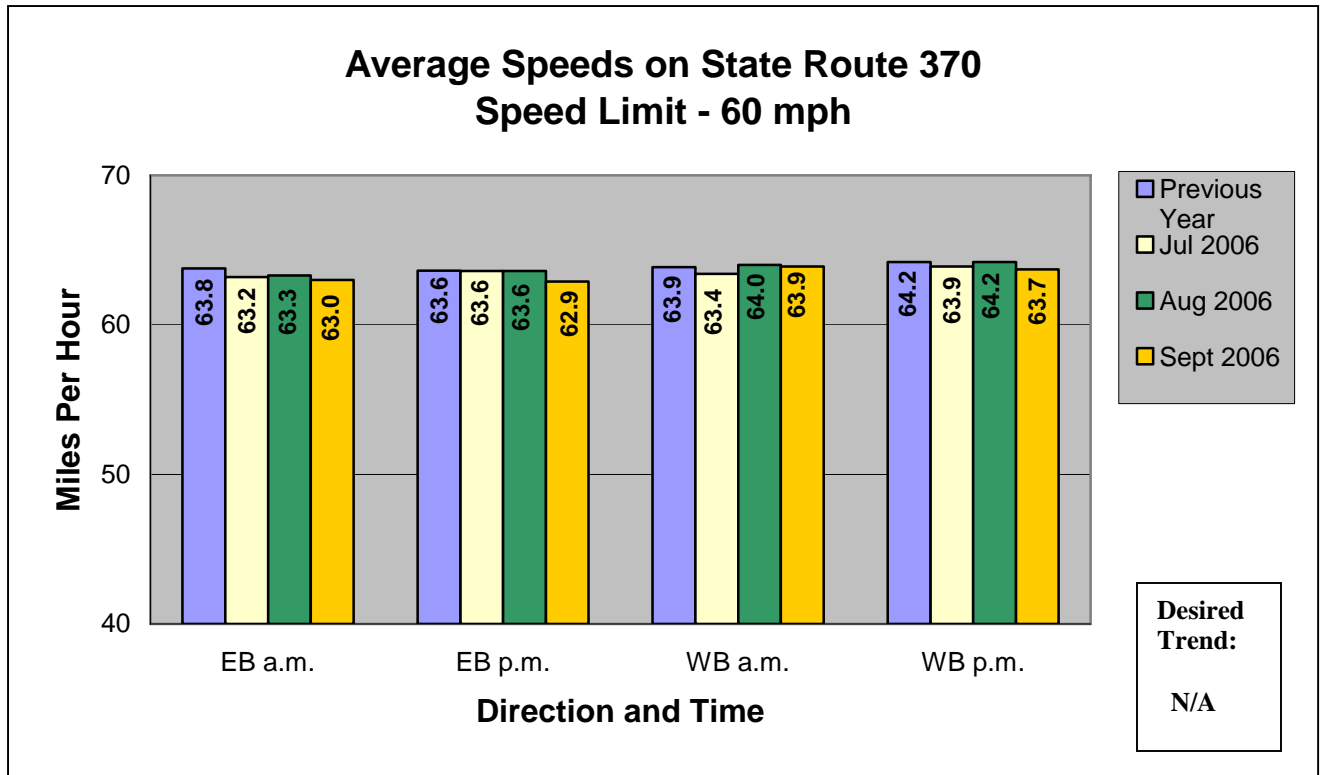
### Average Speeds on Interstate 55 Speed Limit - 60 mph (55 mph from I-44 to River)



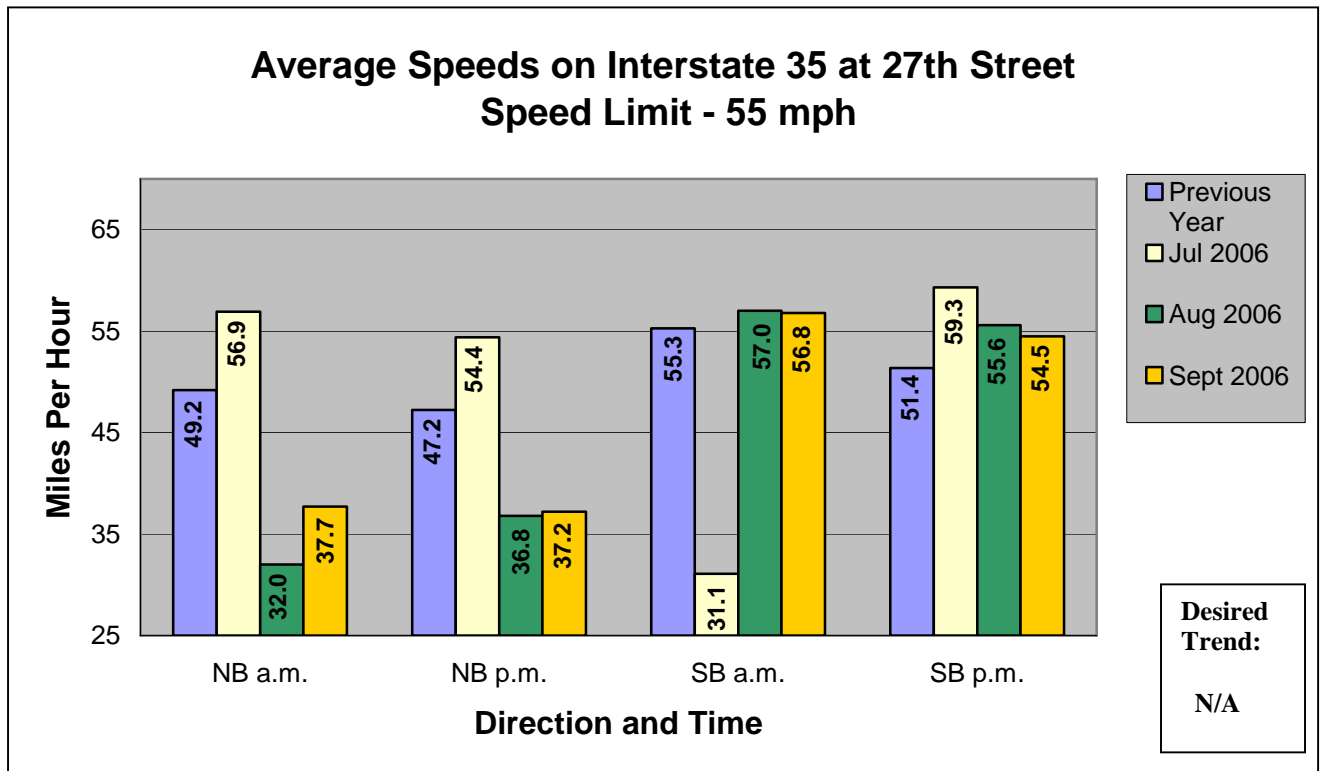
### Average Speeds on Interstate 64 Speed Limit - 55 mph



## ST. LOUIS

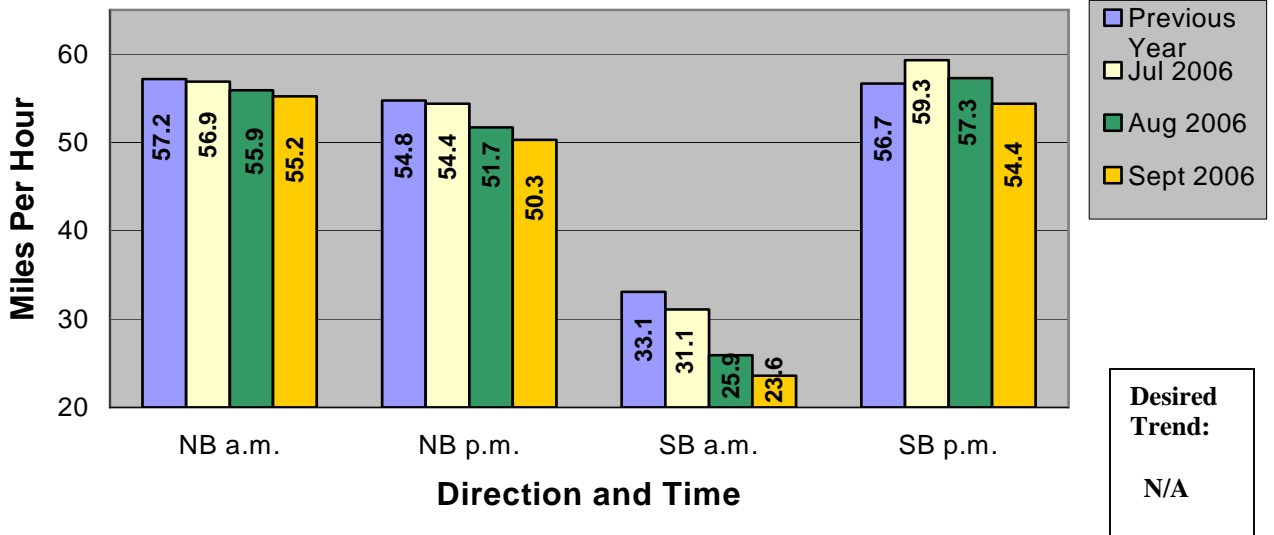


## KANSAS CITY

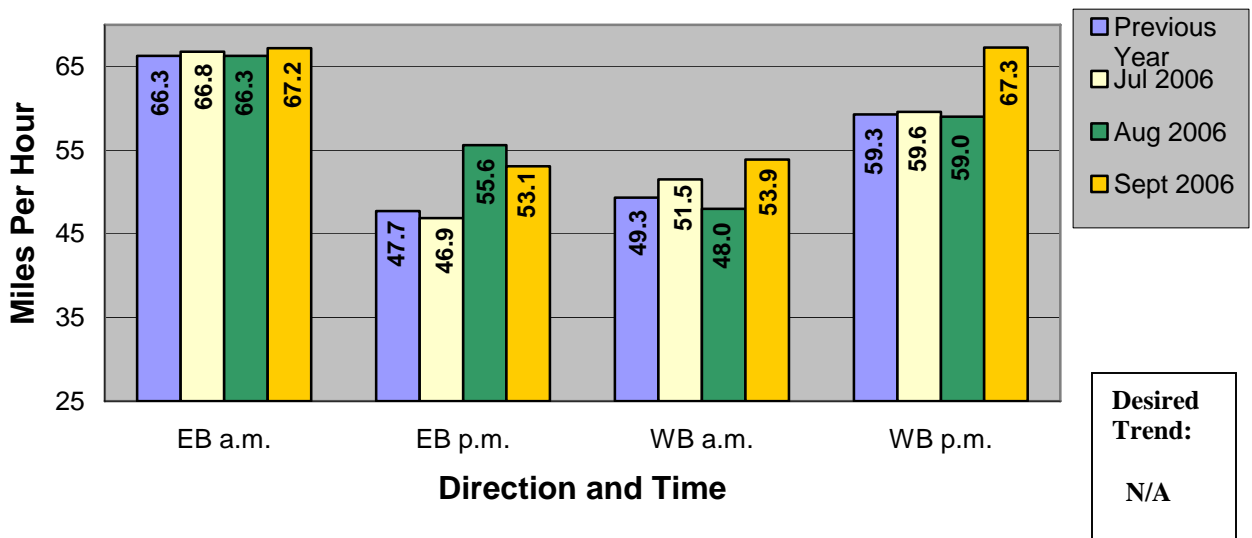


## KANSAS CITY

### Average Speeds on Interstate 35 at Armour Road Speed Limit - 55 mph

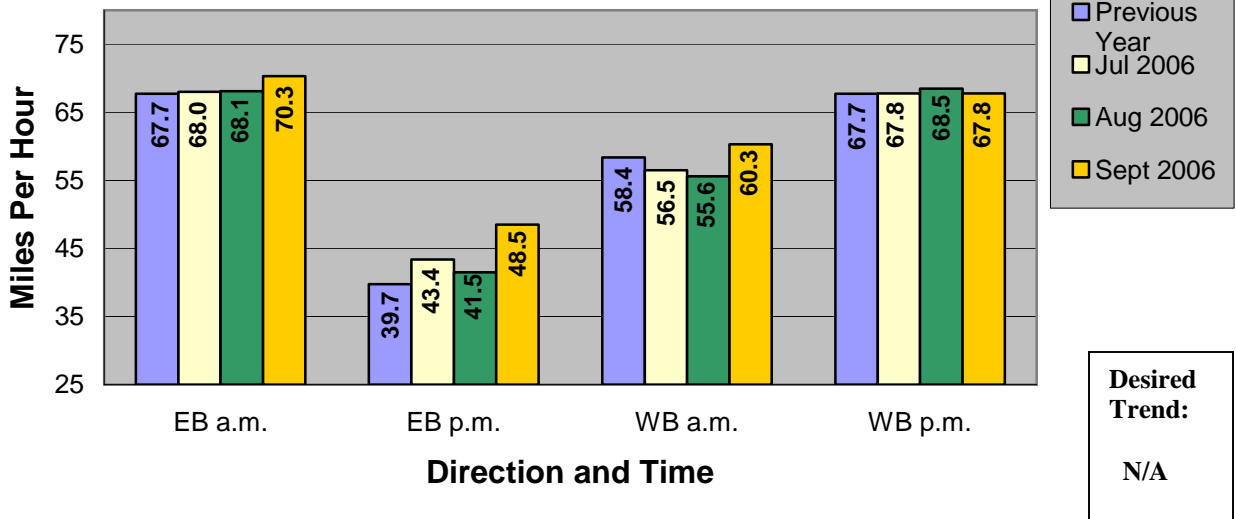


### Average Speeds on Interstate 70 at Blue Ridge Cutoff Speed Limit - 65 mph



**KANSAS CITY**

**Average Speeds on Interstate 435 at 104th Street  
Speed Limit - 65 mph**





## Uninterrupted Traffic Flow

### *Average time to clear traffic incident*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Technical Support Engineer

**Purpose of the Measure:**

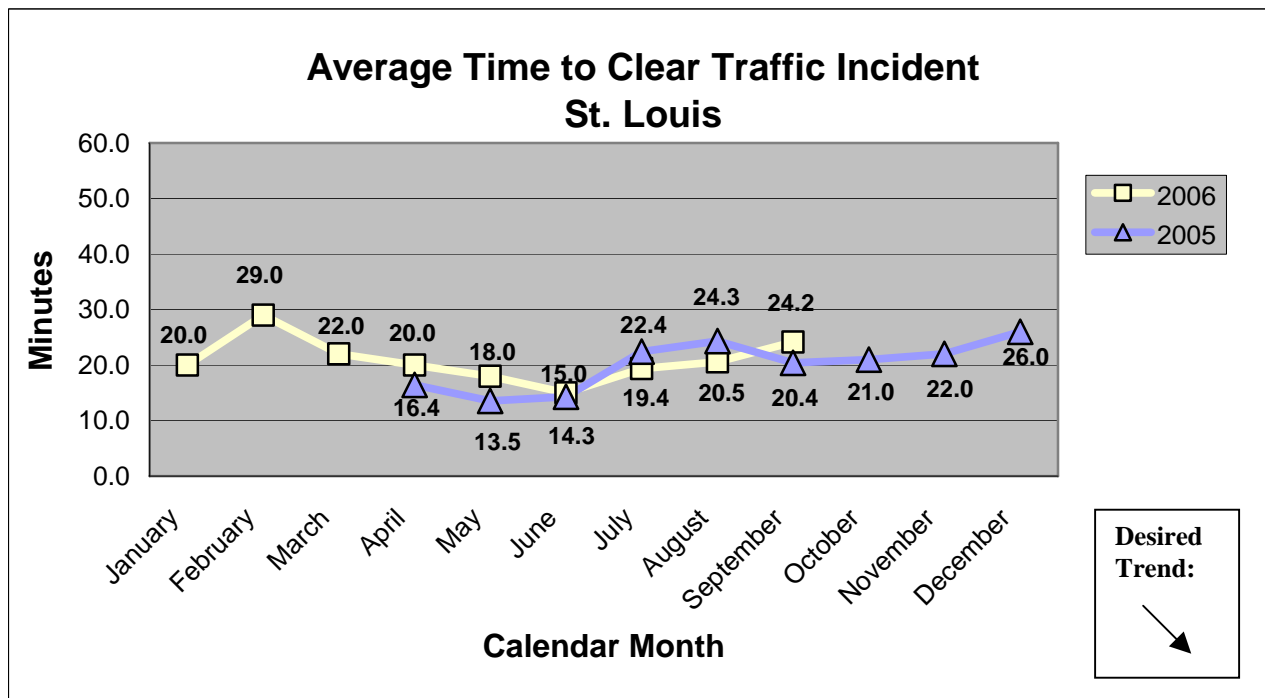
This measure is used to determine the trends in incident clearance on the state highway system. A traffic incident is an unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance.

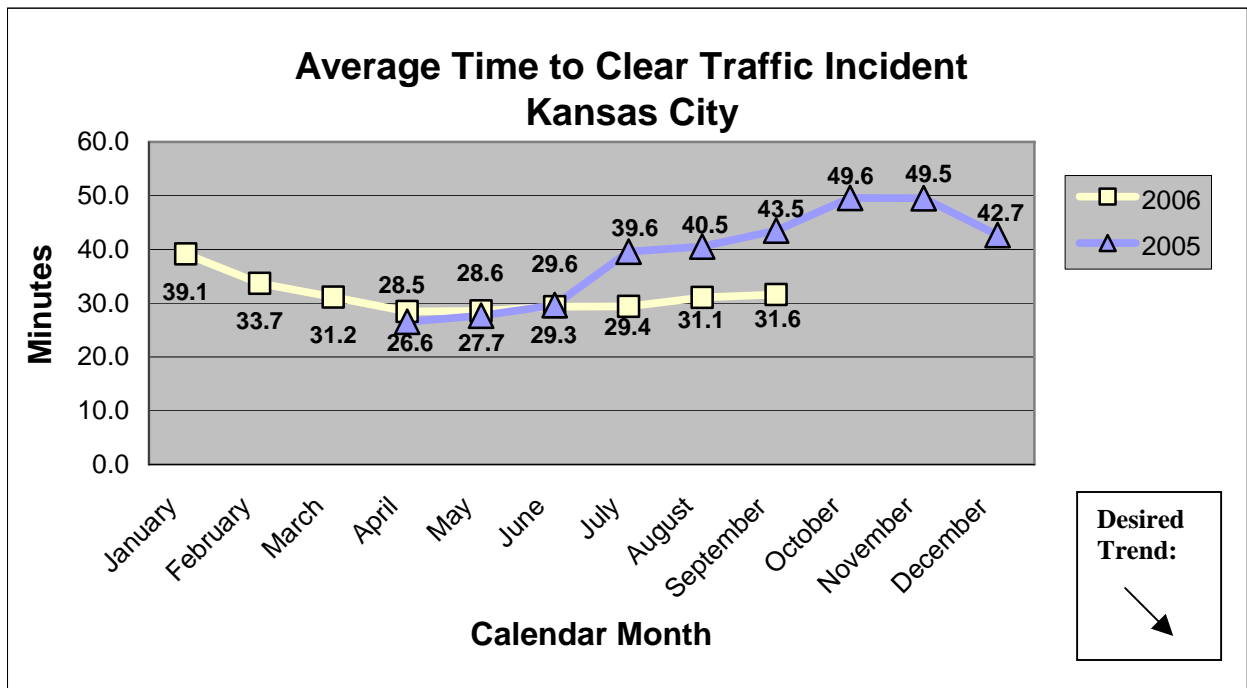
**Measurement and Data Collection:**

Collection of data began March 1, 2005. Motorist Assist operators and Traffic Management Center staff are recording "time of arrival" and the time for "all lanes cleared." Average time to clear traffic incidents is calculated from these times. The data includes only those incidents handled by Motorist Assist and urban Emergency Response crews in the Kansas and St. Louis areas.

**Improvement Status:**

Overall, data shows that both St. Louis and Kansas City areas continued to experience consistent incident clearance times. The slight increase in St. Louis during September can be attributed to an operations shutdown due to the death of a Motorist Assist operator and the impact on the St. Louis operators. Renewed efforts in incident management in the St. Louis and Kansas City regions are helping to develop long-term partnerships with local agencies and identify MoDOT's expectations for quick clearance and open roadways with the ultimate goal of improving clearance times.





## Uninterrupted Traffic Flow

### *Average time to clear traffic backup from incident*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Technical Support Engineer

**Purpose of the Measure:**

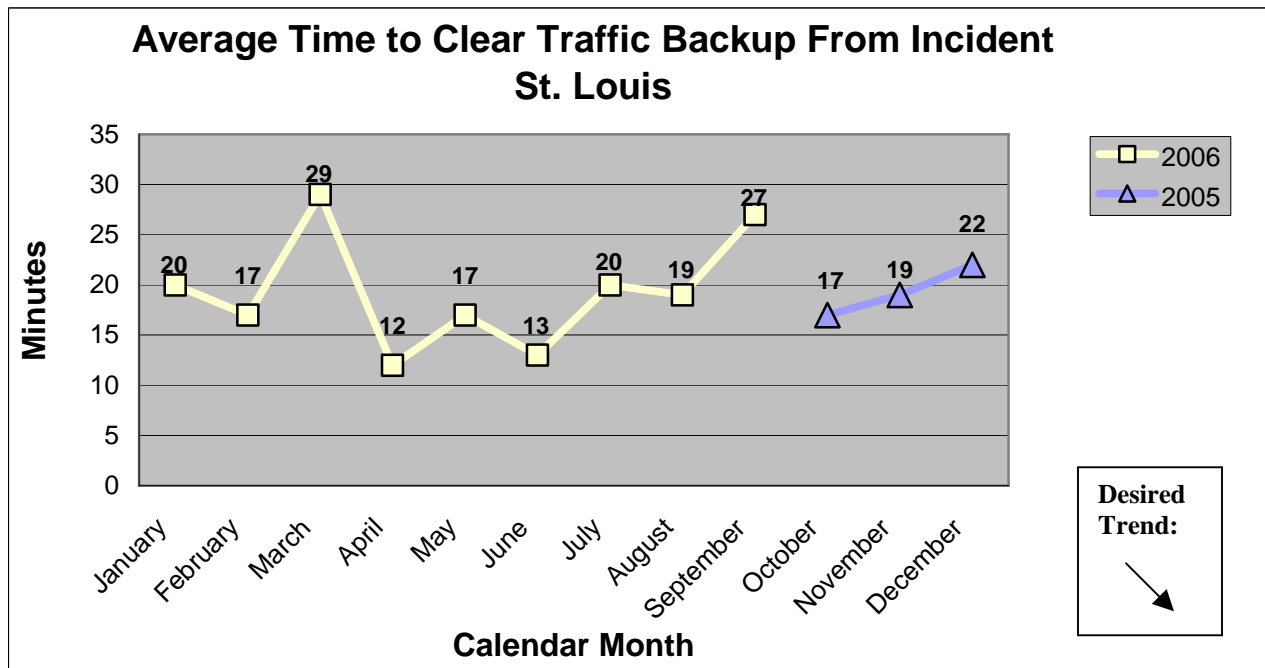
This measure tracks the amount of time it takes to return traffic flow back to normal after a traffic incident. A traffic incident is any unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road.

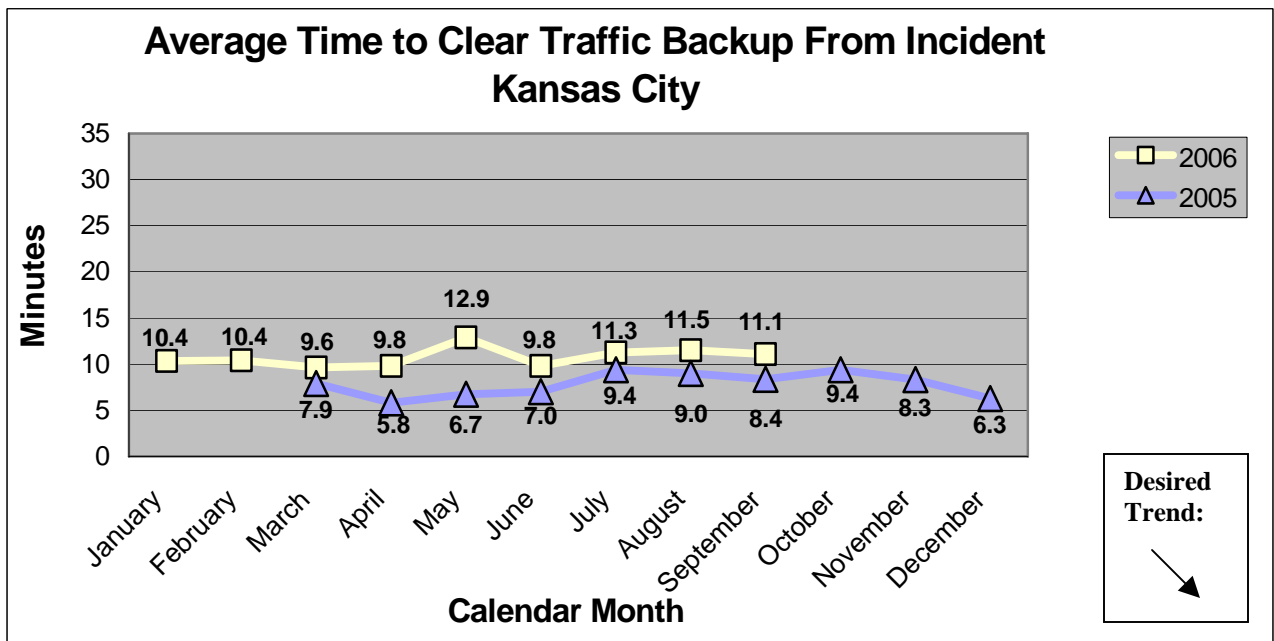
**Measurement and Data Collection:**

“Lanes cleared” and “clear backup” times are being recorded by the Traffic Management Center operators using automated detection systems. The Kansas City area has devices to collect data along portions of interstates 435 and 70. St. Louis collects data manually using video equipment and verification from Motorist Assist operators. St. Louis will use advanced transportation management system devices and software when they become available. Average times to clear traffic backups are calculated from these recorded times.

**Improvement Status:**

This data shows clearance times in Kansas City average around 11 minutes, while the St. Louis metro area clearance times are higher. The St. Louis data is somewhat skewed because it includes most major incidents on the St. Louis freeway network. The St. Louis data does not necessarily capture short-term incidents that clear before a Motorist Assist operator can get to the scene. The Kansas City data includes all detected incidents on the KC Scout, the Kansas City emergency response unit, instrumented routes. St. Louis area routes also have larger traffic volumes that create more significant congestion problems than in Kansas City. The spike in St. Louis data in March 2006 is largely due to two major incidents during peak periods. There are also minor spikes in May 2006 in both St. Louis and Kansas City again due to major incidents during peak periods. The spiked increase in the St. Louis clearance time in September of 2006 is due to the seasonal traffic increases and increased number of work zones in the area.





## Uninterrupted Traffic Flow

### *Number of customers assisted by the Motorist Assist program*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Technical Support Engineer

**Purpose of the Measure:**

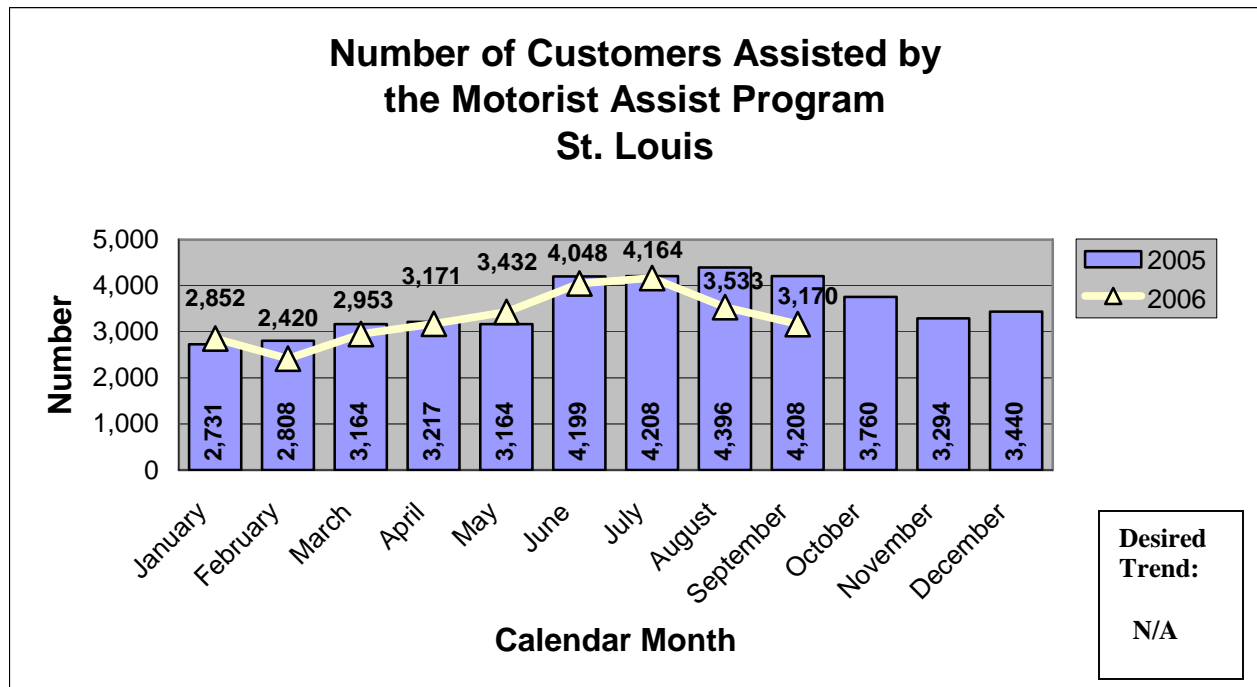
This measure is used to gauge the use of the Motorist Assist programs. Incidents impact Missouri's transportation system capacity. An incident is any unplanned event that creates a temporary reduction in roadway capacity that impedes normal traffic flow. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires, stalled vehicles, etc.) improves system performance. Our Motorist Assist operators are able to respond to nearly every incident, major or minor, in the areas they cover.

**Measurement and Data Collection:**

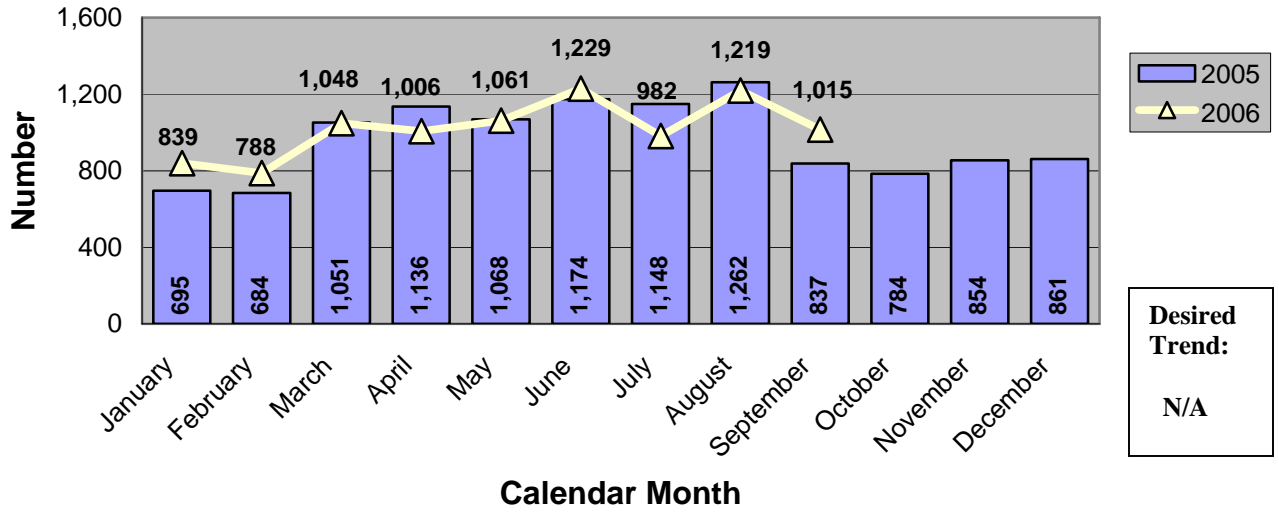
Monthly data collection began in January 2005. The Motorist Assist operators record each assist and then prepare a monthly summary. St. Louis operators patrol approximately 160 freeway miles, while Kansas City operators patrol approximately 60 freeway miles.

**Improvement Status:**

This data demonstrates that the Motorist Assist program in both St. Louis and Kansas City experienced a routine increase in assists due to increased temperatures and roadway volumes. This data demonstrates a typical pattern of increased assists during peak travel season, followed by a decrease in services in late summer and early fall. The decreased number of assists in Kansas City in July is attributed to a decrease in operators available for that time period due to multiple vacations and sick time. The decreased number of assists in St. Louis in the months of August and September is attributed to period of time the operations were shut down due to the death of a Motorist Assist operator in the month of August and its impact on the St. Louis operators.



# **Number of Customers Assisted by the Motorist Assist Program Kansas City**



## Uninterrupted Traffic Flow

### *Percent of Motorist Assist customers who are satisfied with the service*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Technical Support Engineer

**Purpose of the Measure:**

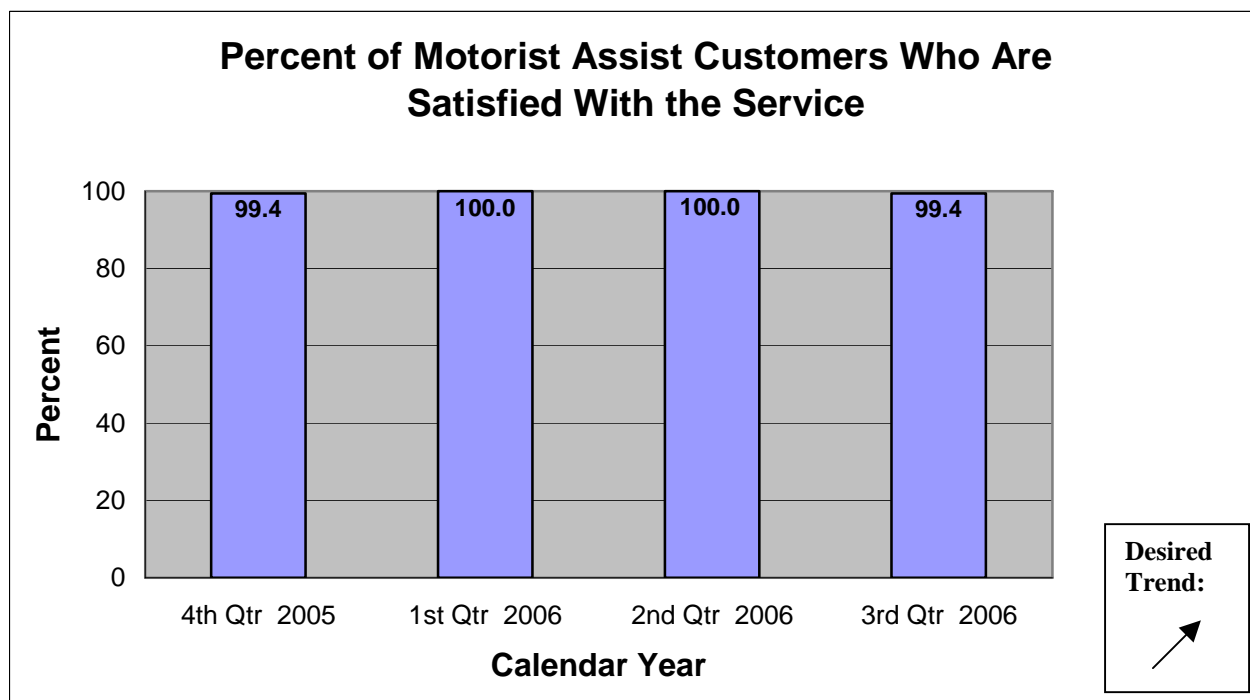
This measure helps evaluate services provided through MoDOT's Motorist Assist Program, specifically whether the customers who use the program are satisfied with the service. Information received provides direction on how to better serve our customers and keep traffic moving safely and efficiently.

**Measurement and Data Collection:**

Motorist Assist operators distributed survey cards to customers starting June 1, 2005. Data from the cards is compiled and tabulated by the Missouri Transportation Institute. Surveys with selections identifying that the service was "probably" or "definitely" valuable were tabulated as "satisfied" for this measure.

**Improvement Status:**

The data for this measure included responses from 361 surveys in the fourth quarter of calendar year 2005, 380 surveys in the first quarter of 2006, 447 surveys in the second quarter of 2006 and 704 surveys in the third quarter of 2006 by motorists who used the Motorist Assist service in the Kansas City or St. Louis metro areas. This data agrees with information provided by customers on prior comment forms - almost all customers are satisfied.



## Uninterrupted Traffic Flow

### *Percent of signals observed*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Julie Stotlemeyer, Signal and Lighting Engineer

**Purpose of the Measure:**

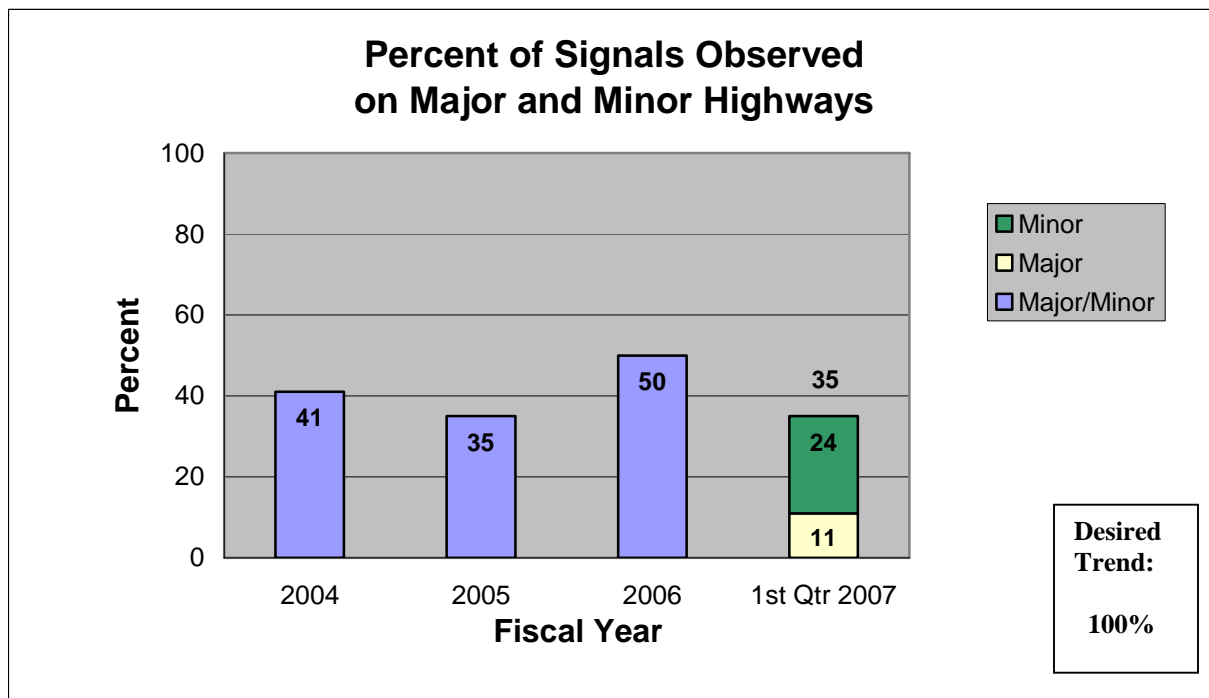
This measure tracks how well the department is monitoring the signal system to improve traffic flow.

**Measurement and Data Collection:**

Traffic engineers document observed signal data on an observation sheet and the observation date is recorded in the Transportation Management System database. Data is collected from the TMS database to generate the report. A complete signal observation requires personnel to monitor the signal during four different times of day: a.m. peak, noon peak, p.m. peak and off peak.

**Improvement Status:**

All signals on major and minor highways should be observed each year to ensure proper operation and verify effective traffic flow. To support the major / minor roadway direction, observations are now tracked accordingly. Observations for first quarter fiscal year 2007 are up 24 percent compared to the same period last year. This continued rate of progress will result in completion of the signal observation program.





## Uninterrupted Traffic Flow

### *Percent of retimed signals*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Julie Stotlemeyer, Signal and Lighting Engineer

**Purpose of the Measure:**

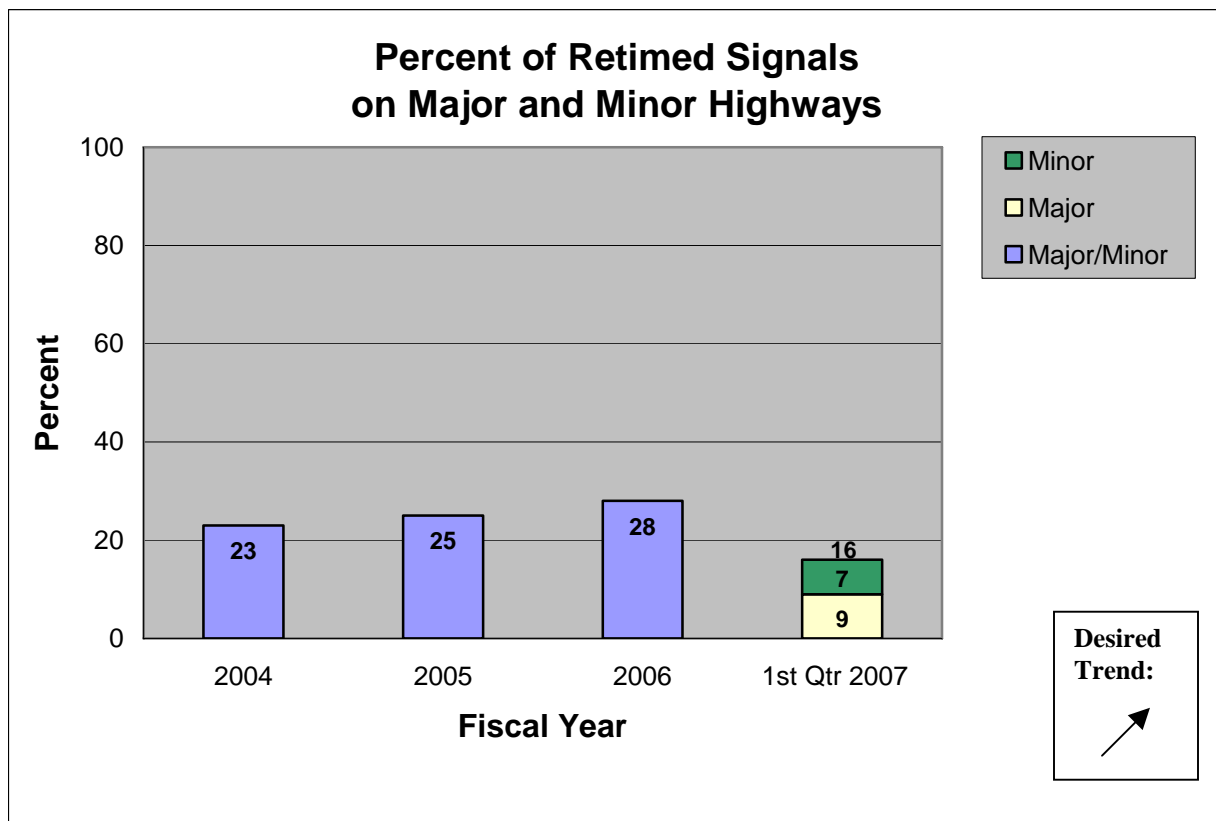
This measure tracks how well the department is adjusting the timing of the signal system to improve traffic flow.

**Measurement and Data Collection:**

Traffic engineers recorded retimed signal data and entered the date in the Transportation Management System database. Data is collected from the TMS database to generate the report. MoDOT retimes traffic signals for general observation or in response to a complaint. In most instances, signals are retimed based on observational studies. In order to maintain uninterrupted traffic flow, signals should be retimed at least every three years. Therefore, MoDOT should retime 33 percent of its signal system each year. Retiming signals for efficient operation should involve an in-depth study, and this may not be reflected in this measure.

**Improvement Status:**

Signals on major highways should be retimed every three years and minor highways every five years. To support the major / minor roadway direction, signal retimings are now tracked accordingly. Retimings for first quarter fiscal year 2007 are up nine percent compared to same period last year. Minor roadways are two percent above target for first quarter and major roads are at target.



## Uninterrupted Traffic Flow

### *Percent of work zones meeting expectations for traffic flow*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Scott Stotlemeyer, Technical Support Engineer

**Purpose of the Measure:**

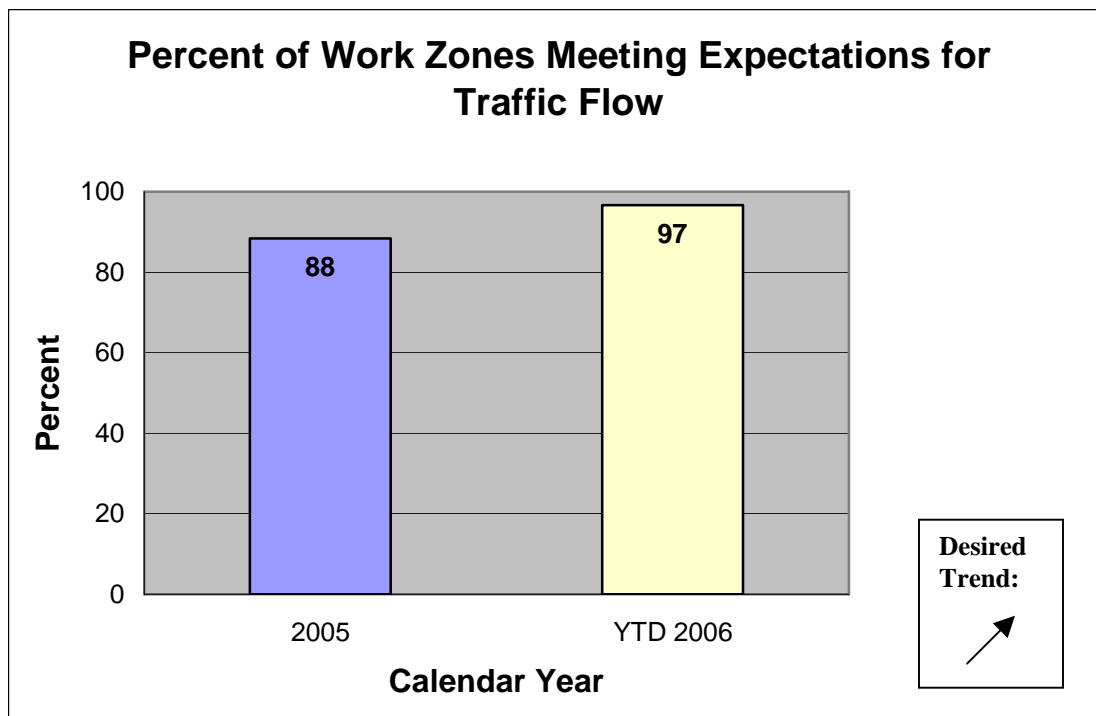
An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation, and maintenance is the measurement of our work zones affect on the mobility of highway users. This measure tracks how well the department meets customer expectations of work zones on state highways.

**Measurement and Data Collection:**

Using a formal inspection worksheet, Construction and Materials, Maintenance, Traffic and the district staff evaluate mobility in work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors affecting traffic flow. The evaluator assigns a pass, fail or n/a rating to each of these individual factors and a pass or fail rating for their overall perception of traffic flow in, around and through the work zone. The overall perception ratings are compiled quarterly and reported via this measurement. This inspection program began in June 2005.

**Improvement Status:**

The results of the 1,899 inspections this calendar year (235, 759, and 905 in the first three quarters, respectively) show great progress in this measure, as the percent of work zones meeting mobility expectations rose by 8.3 percent over calendar year 2005 inspection results. The increase may be attributed to MoDOT's emphasis on creating exemplary work zones by minimizing work zone congestion and delays despite increased traffic demand and volume of work zones in Missouri this year.



## Uninterrupted Traffic Flow

### *Time to meet winter storm event performance objectives on major and minor highways*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Technical Support Engineer

**Purpose of the Measure:**

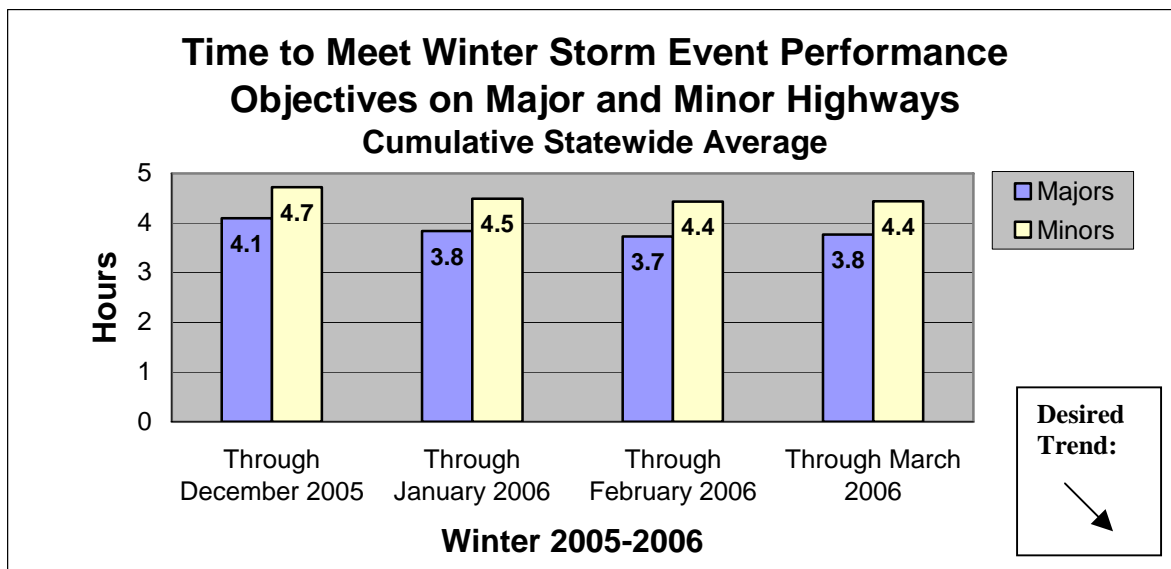
This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts.

**Measurement and Data Collection:**

This data is collected in the Lotus Notes winter event database. This measurement will track the actual time involved in this process so improvements can be made. After each winter event, such as a snow or ice storm, area maintenance personnel submit a report indicating how much time it took to clear snow from the major and minor highways. Data collection began after the first snowfall this winter for inclusion in the January 2006 Tracker. After a storm ends, the objectives are to restore the major highways to a wet or dry condition as soon as possible, restore the higher volume (greater than 1,000 average daily traffic) minor highways to a wet or dry condition as soon as possible, and have the lower volume (less than or equal to 1,000 average daily traffic) minor highways open to two-way traffic and treated with salt and/or abrasives at all critical areas such as intersections, hills and curves as soon as possible. The end of the storm is defined as when freezing precipitation stops accumulating on the roadways, either from falling or drifting conditions.

**Improvement Status:**

The two categories for minor highways were averaged into one number for all minor highways. From December to January, the time to meet the winter storm event performance objectives decreased by a small amount. These times remained relatively fixed for the remainder of the winter season due to the fact that there were very few additional snowstorms in Missouri. This winter was a very mild winter for the state in terms of winter events and below-freezing temperatures. An advanced snow removal-training module is being developed for veteran employees and supervisors to increase consistency and efficiency in this area. MoDOT continues to upgrade equipment by providing wider snowplows and towplows to improve efficiency.



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# Smooth and Unrestricted Roads and Bridges

*Tangible Result Driver – Kevin Keith,  
Chief Engineer*

MoDOT's customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!



## Smooth and Unrestricted Roads and Bridges

### *Percent of major highways that are in good condition*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the condition of Missouri's major highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of state highways.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the interstate system or most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

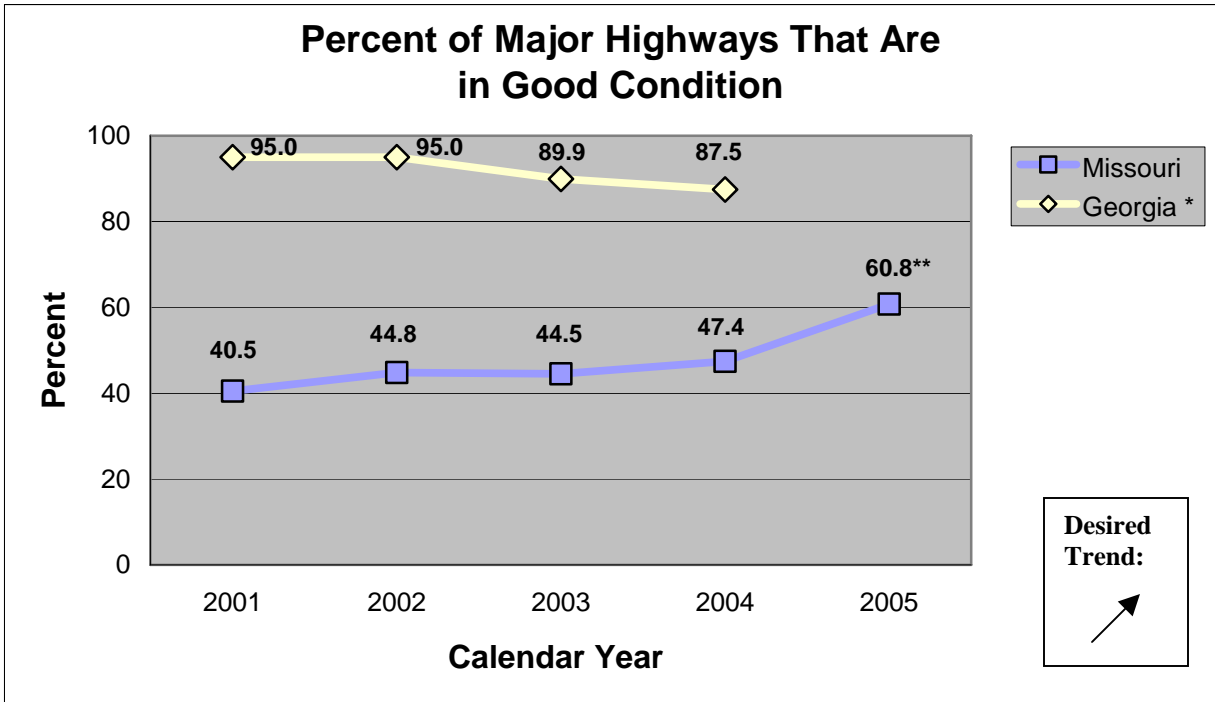
The major roads in Missouri total approximately 5,400 centerline miles. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are five states that report mileage for major highways within 10 percent of that maintained by MoDOT. Of these five, Georgia, with 5,708 miles, currently has the highest percentage of these highways classified in good condition based on smoothness only. The Missouri definition of good uses smoothness as one factor; however, it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri's size.

**Improvement Status:**

More than \$430 million per year is dedicated to taking care of the existing highway system. An additional \$359 million available from Amendment 3 (approved by Missouri voters in November 2004) is added to this sum as part of MoDOT's Smooth Roads Initiative (SRI).

Completion of the first year of the SRI has resulted in a significant improvement in pavement condition. Currently, nearly 61 percent of the major highways are in good condition, an improvement of more than 13 percent. A similar improvement is anticipated by year-end with the completion of the remaining SRI projects. MoDOT is currently developing a plan to address the remaining 3,200 miles of pavement on the major highway system.



\* Source data for Georgia is “Highway Statistics ” published by FHWA. Data for 2005 was not available at time of publication. Georgia data is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.

\*\* The data point for 2005 in Missouri is based on the revised criteria. Prior years have not been adjusted.

## Smooth and Unrestricted Roads and Bridges

### *Percent of minor highways that are in good condition*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the condition of Missouri's minor highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

**Measurement and Data Collection:**

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes mainly serve local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. The minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Where available, on high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes where smoothness is less critical, a Present Serviceability Rating (PSR) or IRI is used. While smoothness is a factor in PSR, physical condition is also a factor.

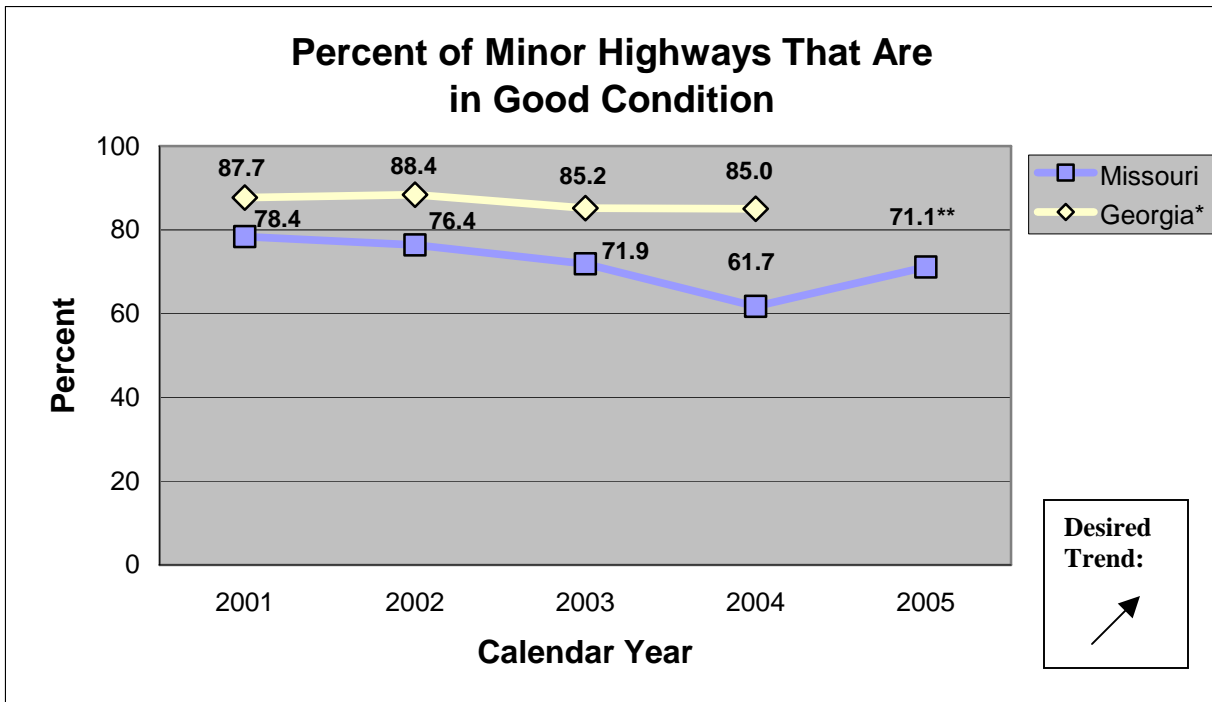
Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are six states that report mileage for minor highways within 10 percent of that maintained by MoDOT. Of these six, Georgia, with 24,315 miles, currently has the highest percentage of these highways classified in good condition. The ratings reported by states as part of the Highway Performance Monitoring System for roads classified as minor more closely relate to Missouri's rating system.

**Improvement Status:**

Prior to 2005, pavement conditions on minor highways had shown a steady decrease. The increase in 2005 is due primarily to modification of the rating method. Prior to 2005, ratings used a combination of automated methods and MoDOT district manual ratings. Sixty percent of minor roads were surveyed using automated methods by MoDOT Transportation Planning staff in 2005. The acquisition of additional equipment in 2006 should allow virtually all state system routes to be rated annually in the future.

Federal Highway Administration allows conditions on minor highways to be reported on either IRI or PSI. PSI includes an assessment of physical distress similar to Missouri's definition. The Missouri definition of good uses smoothness as one factor. However, it also includes other condition factors such as physical distress to determine quality.





\* Source data for Georgia is “Highway Statistics” published by the Federal Highway Administration. Georgia data for 2005 was not available at time of publication. Data is based on a combination of pavement smoothness – IRI or PSR – as submitted as part of the Highway Performance Monitoring System.

\*\* The data point for 2005 in Missouri is based on the revised criteria. Prior years have not been adjusted.

## Smooth and Unrestricted Roads and Bridges

### *Percent of deficient bridges on major highways*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's bridges on major highways. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the interstate system or most U.S. routes such as 63, 54 or 36.

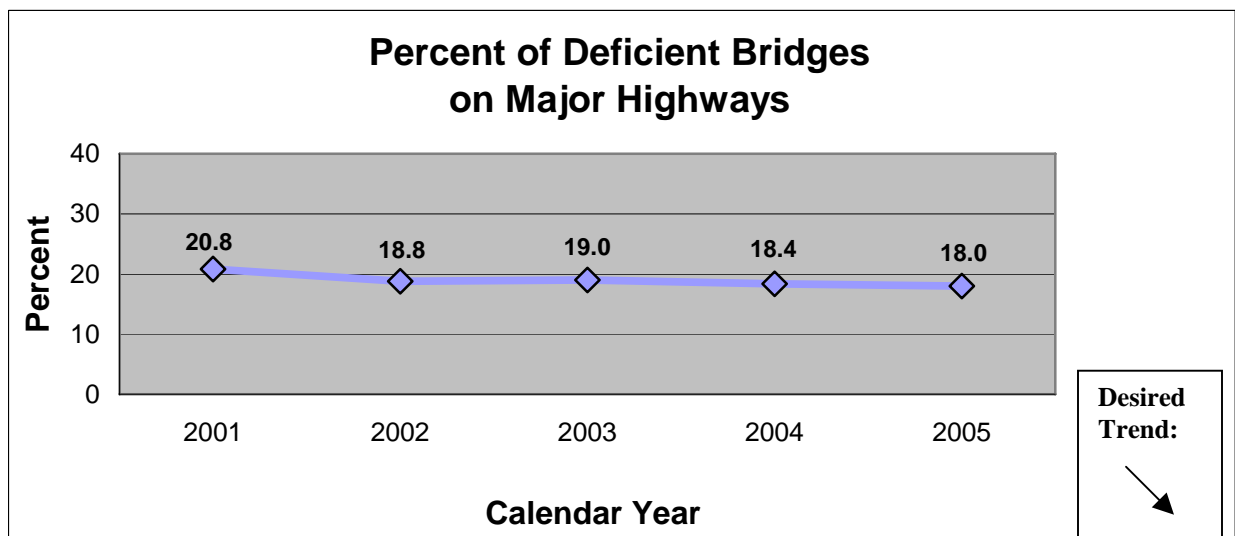
In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 3,300 bridges on major highways.

**Improvement Status:**

Bridge conditions on major highways have shown a moderate improvement. The percent of deficient bridges has been reduced to 18 percent over the last five years as a result of increasing funds directed to care for the existing highway system. A minimum of \$10 million per year has been dedicated to bridge preventive maintenance activities to slow the number of bridges falling into the deficient category.

The Safe & Sound bridge improvement program will address 800 of the state's most critical structures. While most of these bridges are located on the minor highway system, a benefit to bridges on the major highways is also anticipated.



## Smooth and Unrestricted Roads and Bridges

### *Percent of deficient bridges on minor highways*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's minor highway bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

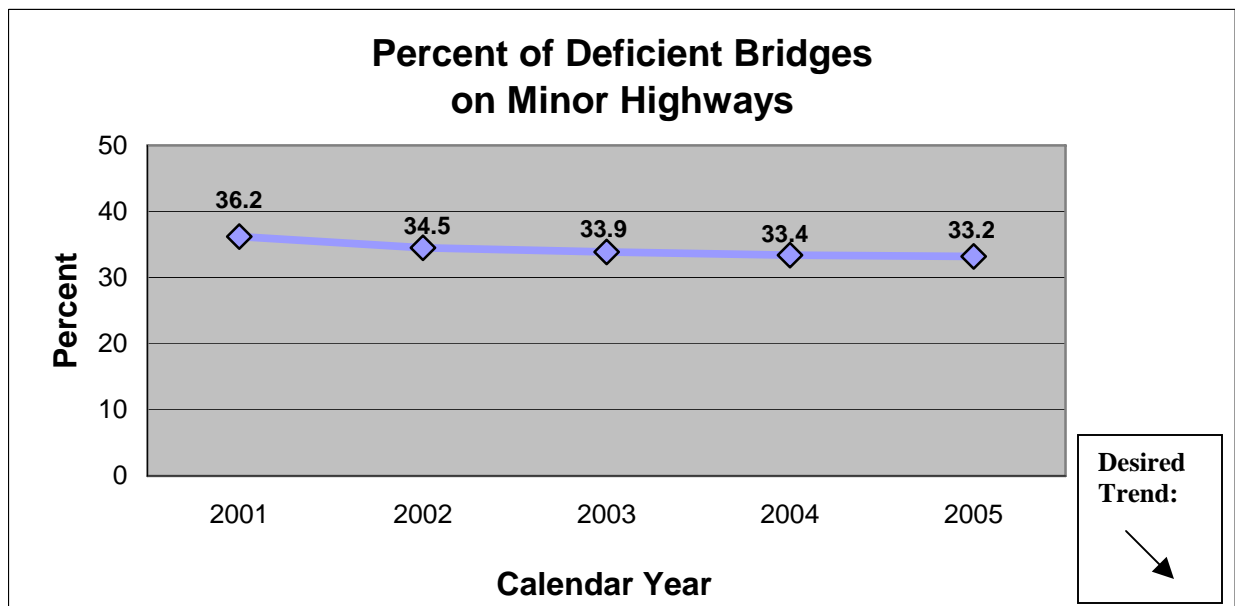
The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 6,924 bridges on minor highways.

**Improvement Status:**

Bridge conditions on minor highways have shown a moderate improvement. The percent of deficient bridges has been reduced to 33.2 percent over the last five years as a result of increasing funds directed to care for the existing highway system. A minimum of \$10 million per year has been dedicated to bridge preventive maintenance activities to slow the number of structures falling into the deficient category.

The Safe & Sound bridge improvement program will address 800 of the state's most critical structures. Most of the bridges identified in this program are on the minor highway system. A substantial decrease in structurally deficient bridges will occur with the completion of this program.



## Smooth and Unrestricted Roads and Bridges

### *Number of deficient bridges on the state system (major and minor highways)*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

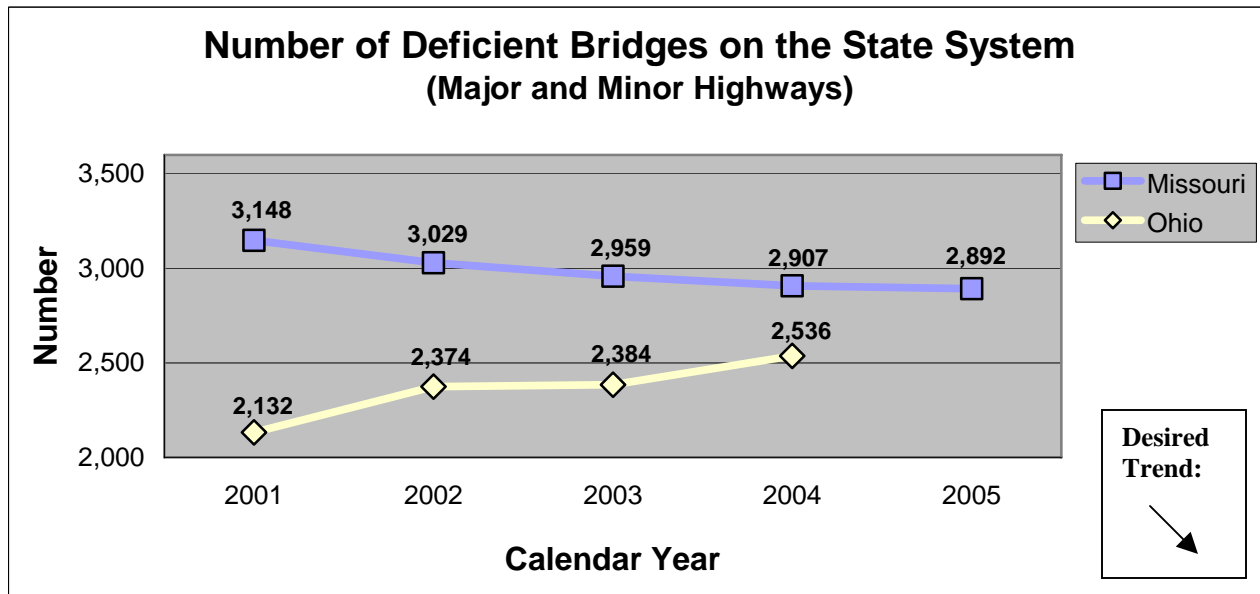
A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently a total of 10,224 bridges on the state highway system.

**Improvement Status:**

Bridge conditions on Missouri highways have shown a moderate improvement in the last five years as a result of increasing funds directed to care for the existing highway system. Currently, 2,892 bridges are considered deficient on the state highway system. A minimum of \$10 million per year has recently been dedicated to preventive maintenance activities on bridges to slow the number of bridges falling into the deficient category.

The Safe & Sound bridge improvement program will address 800 of the state's most critical structures. A marked improvement in the number of structurally deficient bridges will occur with the completion of this program.

The state of Kentucky was used in previous Trackers for comparison purposes. However, changes in its data management system resulted in an extreme fluctuation in data after 2003. Ohio provides data from a similar size system with a more consistent history.



\* Source for Ohio, "Better Bridges" November 2005, for data collected in calendar year 2004. The 2005 data for Ohio is not available at this time.

## Smooth and Unrestricted Roads and Bridges

### *Number of miles completed through the Smooth Roads Initiative*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Machele Watkins, Transportation Planning Director

**Purpose of the Measure:**

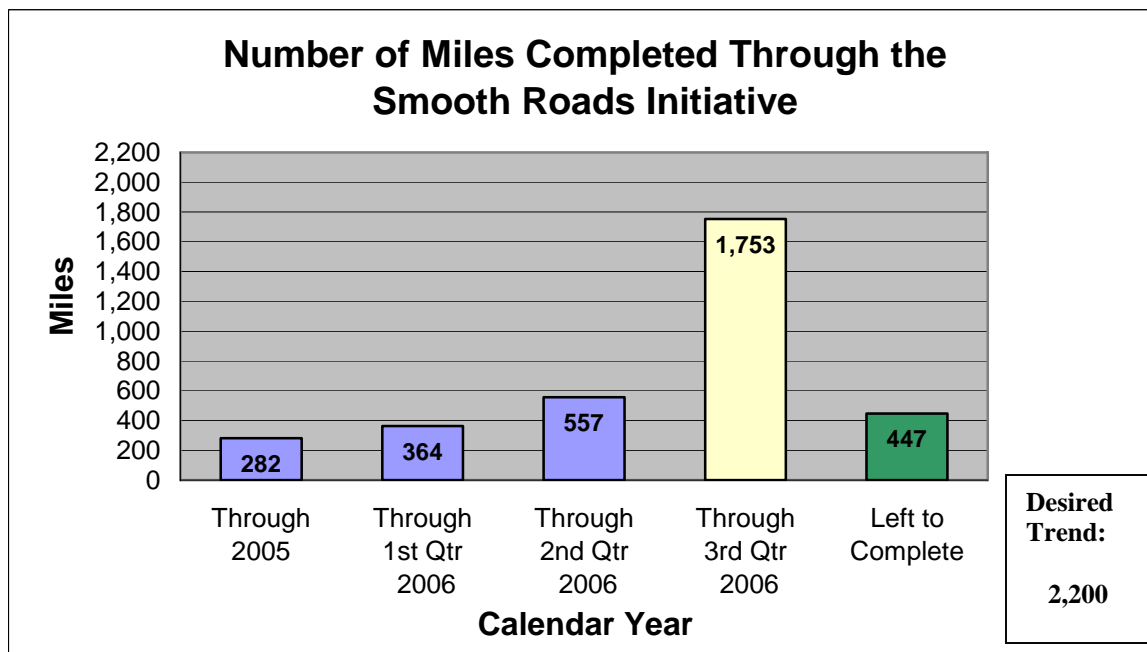
This measure will determine how many centerline miles of roadway have been improved as a result of the Amendment 3 *Smooth Roads Initiative* (SRI). Improvements may consist of pavement, guardrail, delineators, striping or pavement marking projects on Missouri's busiest roadways.

**Measurement and Data Collection:**

The first set of SRI projects was awarded in February 2005. Data collection on this measure began May 1, 2005, with the first reporting in the July 2005 Tracker. Data will be collected and reported on a statewide basis. All of the SRI projects were to be completed within three years. In January 2006, MoDOT accepted Governor Blunt's challenge to complete the SRI projects by December 2006, one year ahead of schedule.

**Improvement Status:**

Statewide, as of October 2006, 1,753 miles of SRI work have been completed. This is up from 557 miles completed in July 2006.



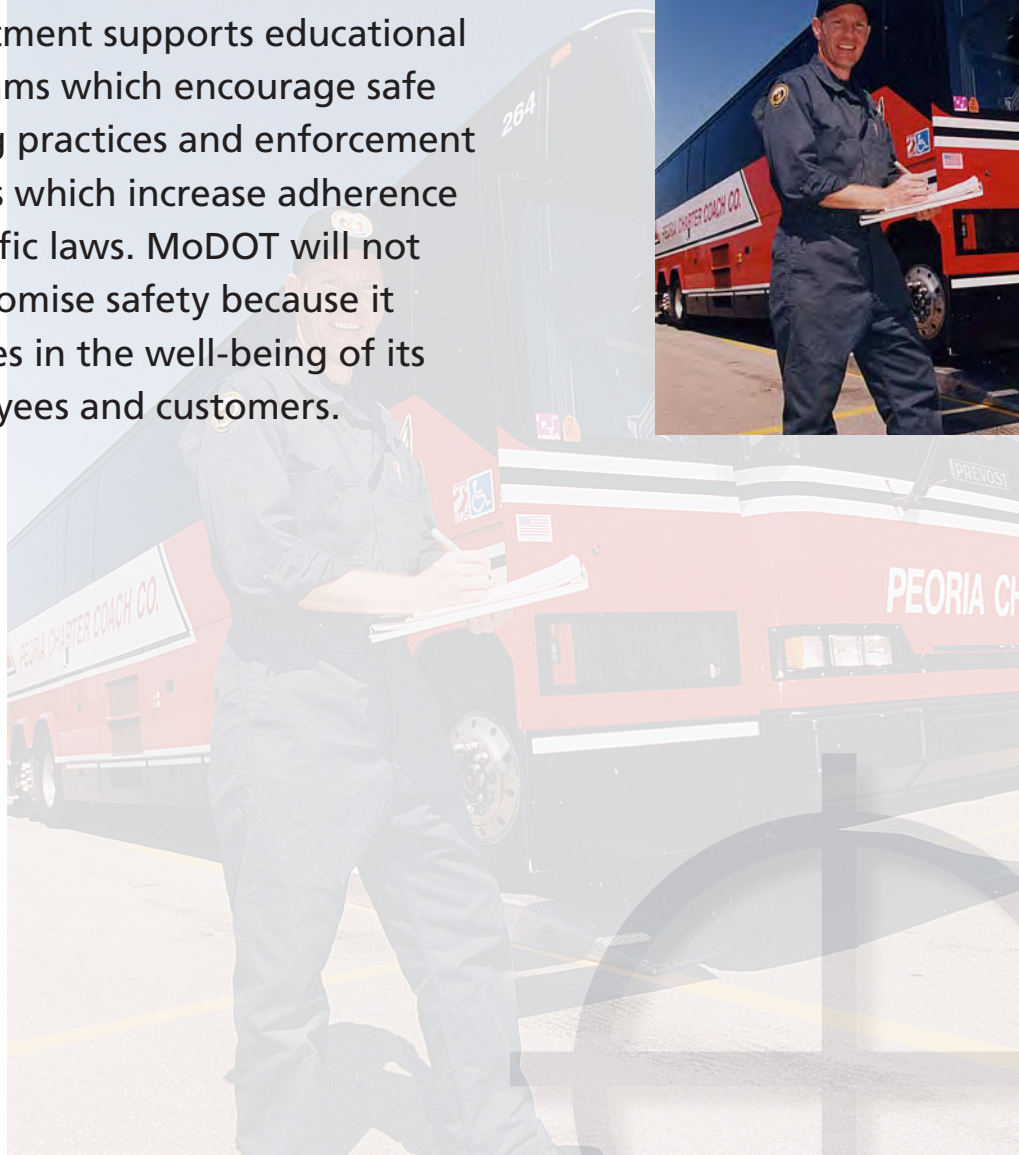
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# Safe Transportation System

*Tangible Result Driver – Don Hillis,  
Director of System Management*

MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs which encourage safe driving practices and enforcement efforts which increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.



## Safe Transportation System

### *Number of fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

#### **Purpose of the Measure:**

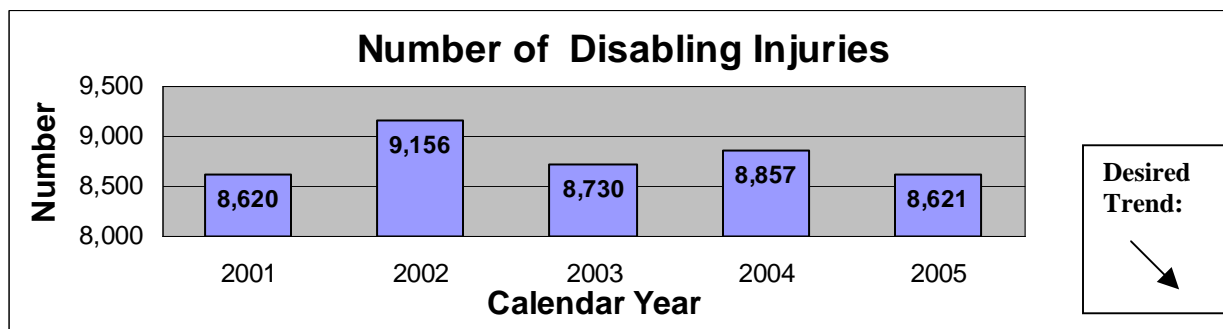
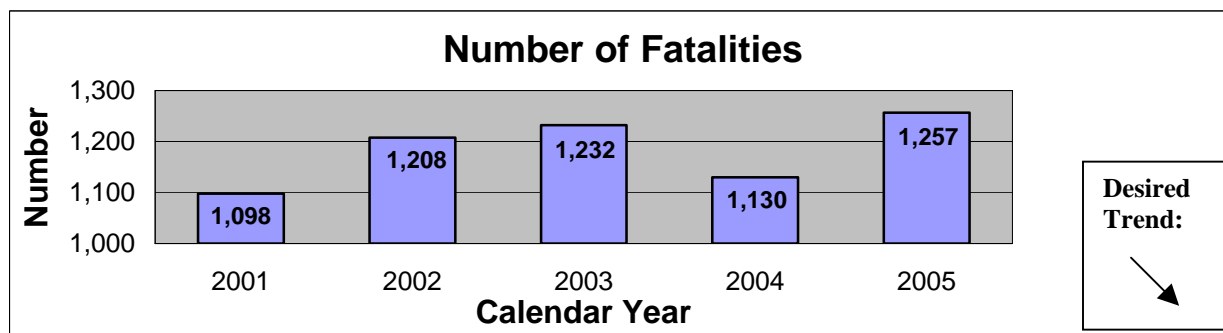
This measure tracks annual trends in fatalities and disabling injuries resulting from Missouri motor vehicle crashes. It will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways,” toward efforts that reduce fatalities and injuries on all Missouri roads.

#### **Measurement and Data Collection:**

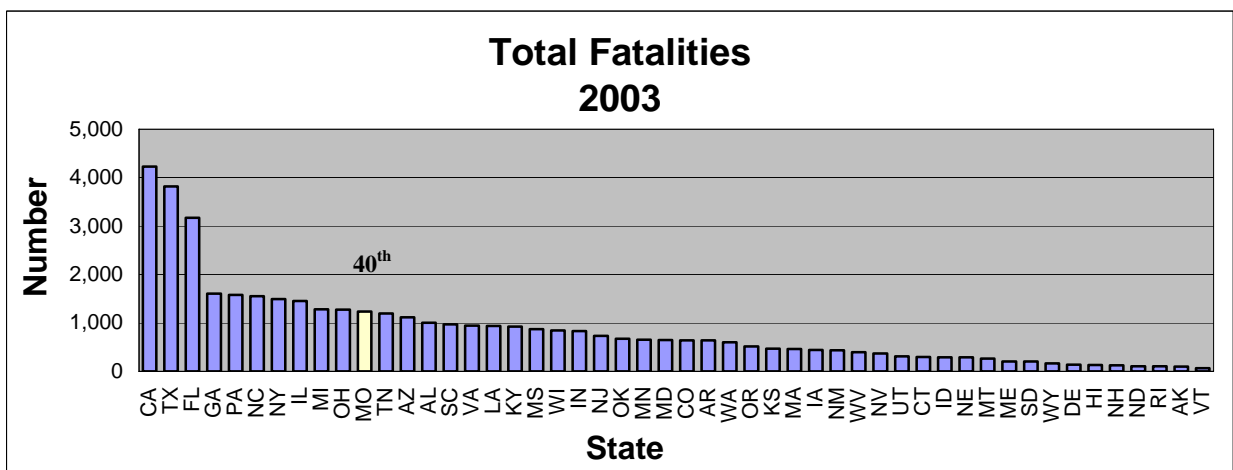
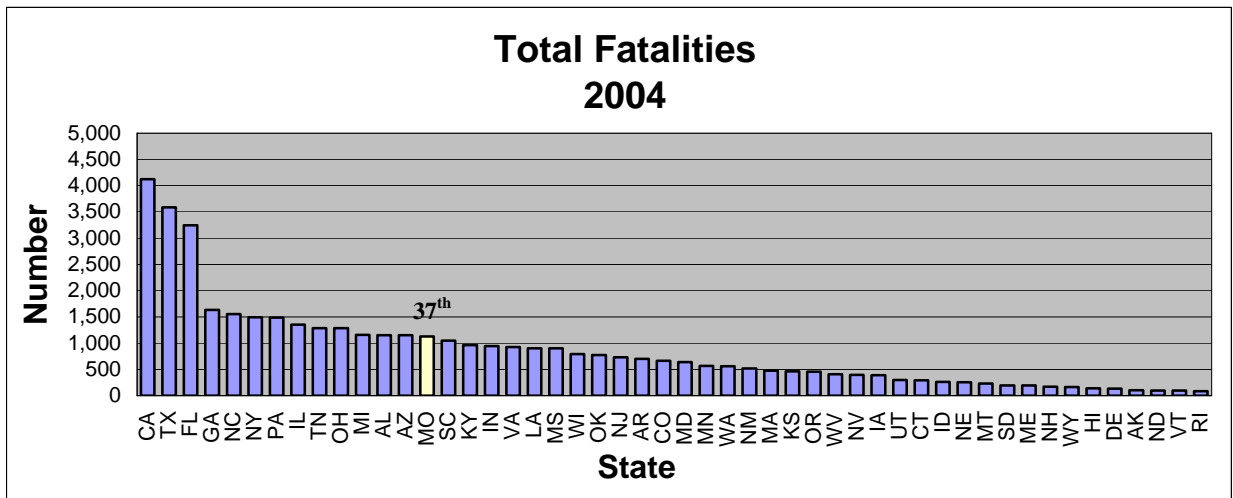
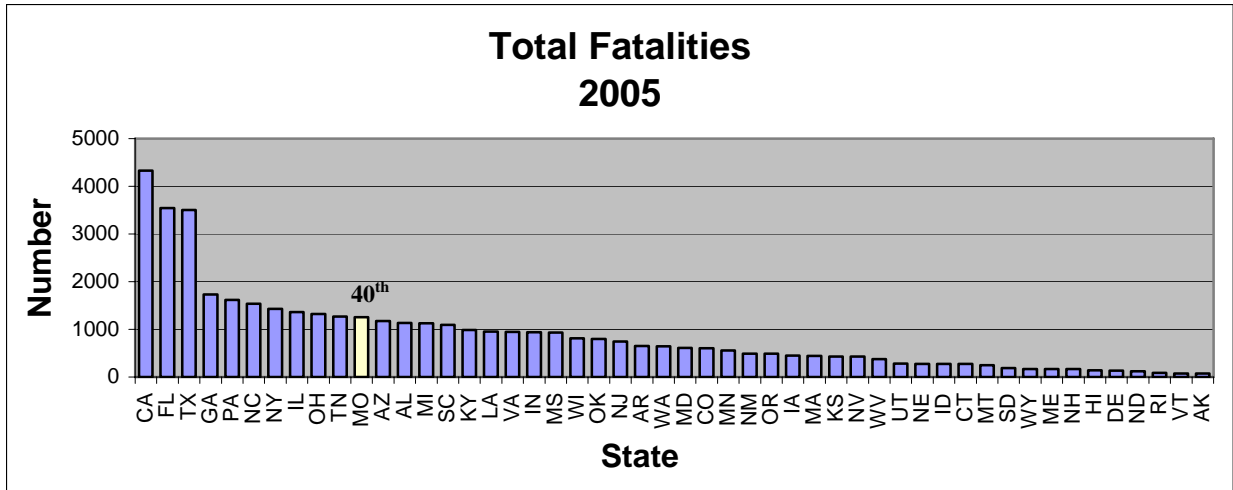
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

#### **Improvement Status:**

Fatalities increased by 11 percent in 2005 after experiencing a significant decrease from 2003 to 2004. Disabling injuries continue to show a decreasing trend. Missouri has decreased its national ranking in the total number of fatalities from 37<sup>th</sup> in 2004 to 40<sup>th</sup> in 2005. Fatalities and disabling injuries are higher due to non-use of safety belts, speeding, and impaired driving. Exposure rate increases each year due to more registered vehicles, licensed drivers and the number of miles traveled. Rural crashes on state numbered roadways continue to be a concern. Focusing public information, education and sustained enforcement efforts on specific behavior demonstrated by specific age groups is the best practice. Safety advocates, organizations and agencies across Missouri have joined together to implement Missouri’s “Blueprint for Safer Roadways.” The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008.







## Safe Transportation System

### *Number of impaired driver-related fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

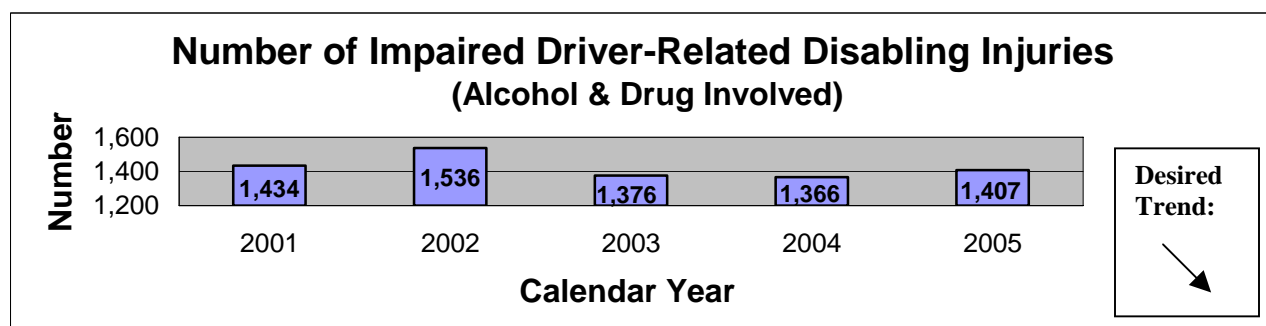
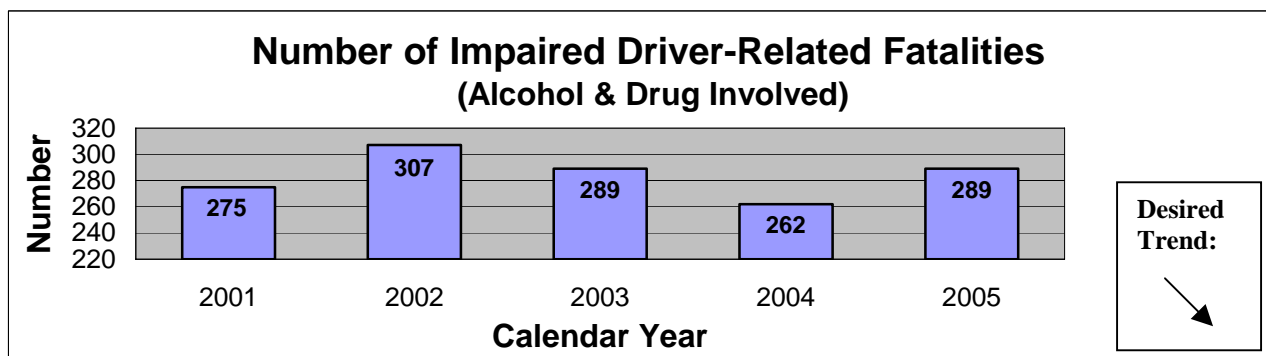
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes involving drivers who are impaired by alcohol and/or drugs. It will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways”, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

**Measurement and Data Collection:**

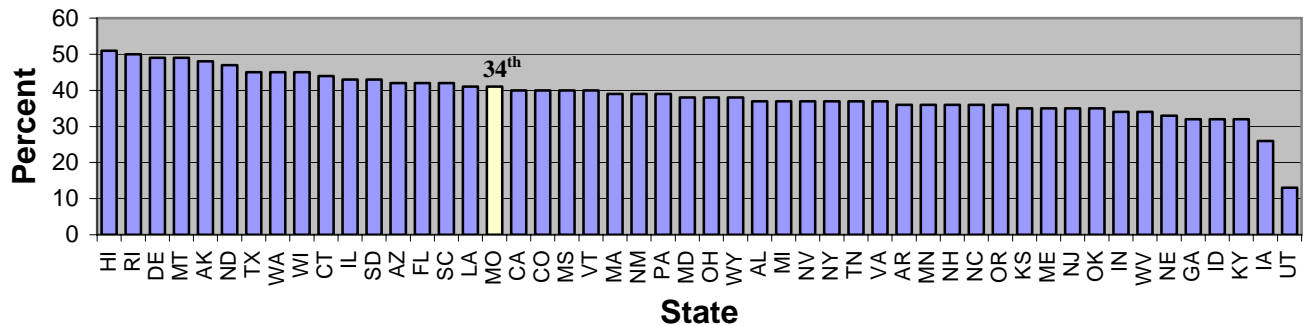
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

**Improvement Status:**

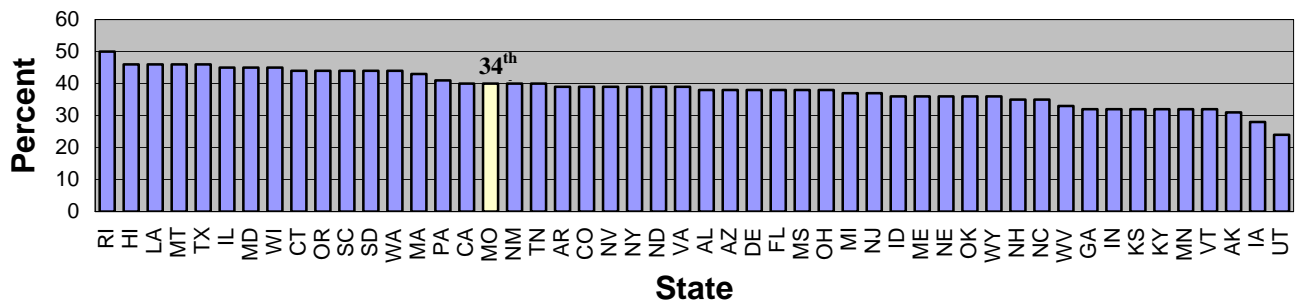
Alcohol- and drug-related fatalities and disabling injuries have decreased since 2002. In the national ranking, Missouri is moving away from the desired downward trend in percent of persons killed in alcohol-related crashes. In addition to Missouri participating in the national “You Drink and Drive, You Lose.” campaign, Missouri joined 14 other states with high alcohol-related crashes as a Strategic Evaluation State. Missouri agreed to increase law enforcement activity through June 2006 in areas that represent 65 percent of the state’s high alcohol-related crashes. Public information and education has been directed at high-risk drivers between the ages of 21 to 35. Law enforcement efforts have been concentrated on high crash corridors. These efforts have helped reduce impaired driving crashes overall. Impaired driving fatalities have increased slightly from 2004 to 2005. Safety advocates, organizations and agencies across Missouri have joined together to implement Missouri’s “Blueprint for Safer Roadways.” The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008.



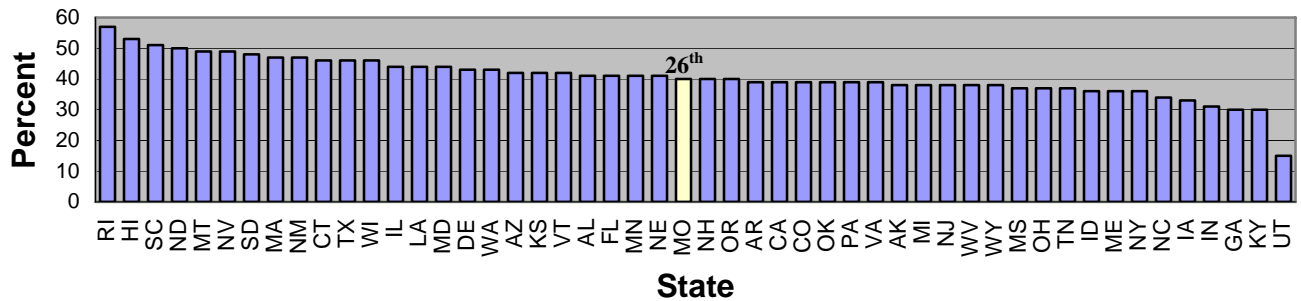
### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2005



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2004



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2003



## Safe Transportation System

### *Rate of annual fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

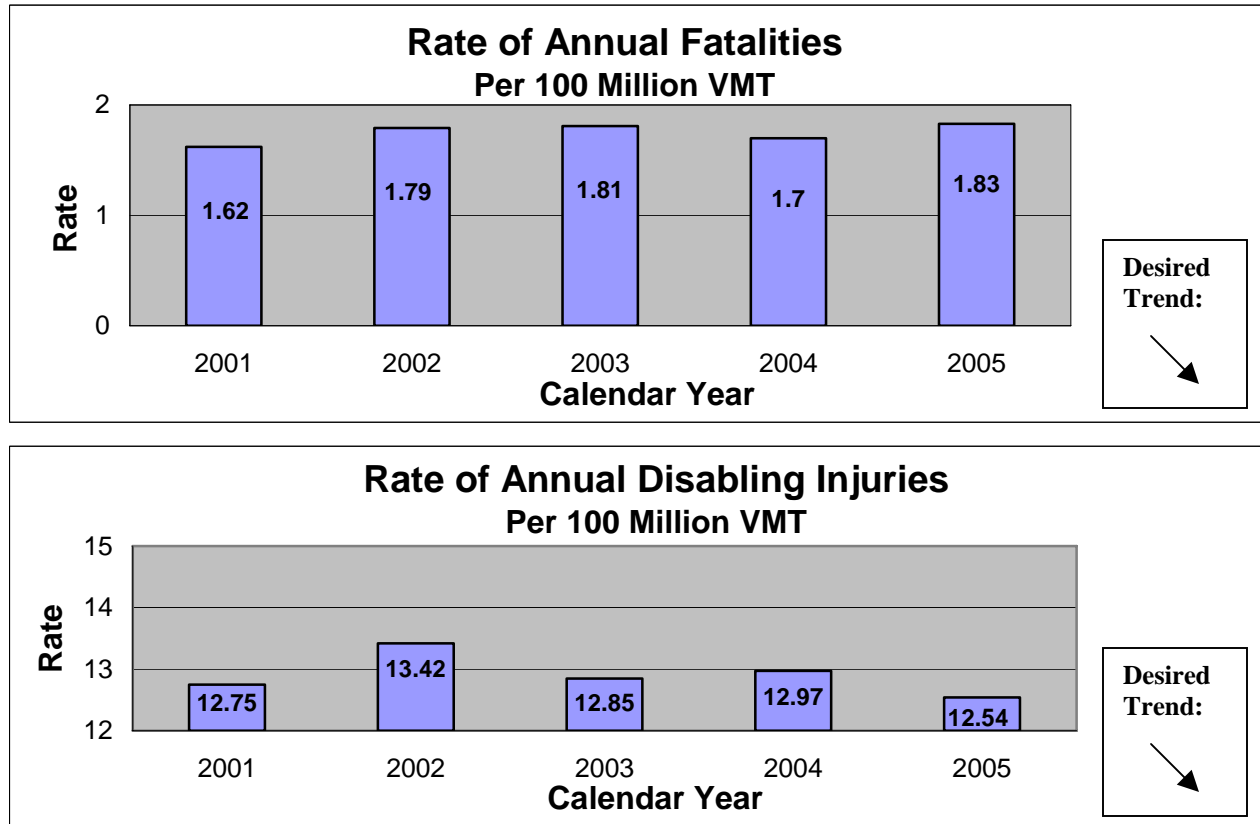
This measure tracks annual trends in fatalities and disabling injury rates per 100 million vehicle miles traveled (HVMT) in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways”, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

**Measurement and Data Collection:**

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Rates cannot be calculated until the Vehicle Miles Traveled (VMT) is calculated in July of the following year.

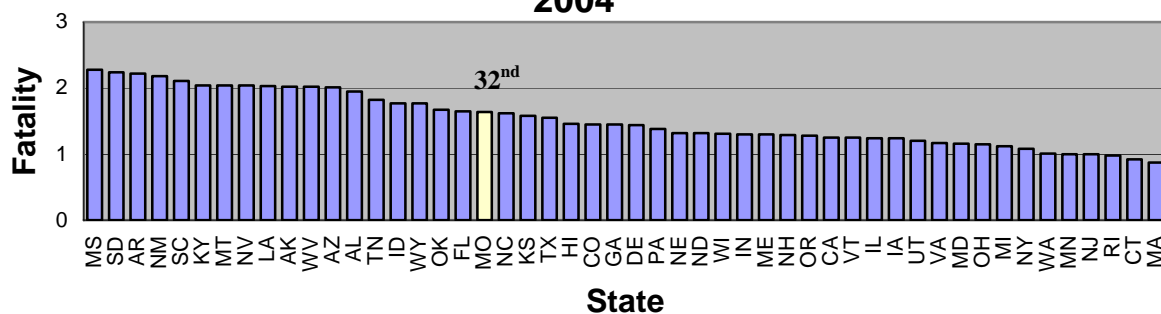
**Improvement Status:**

The fatality rate increased to 1.83 in 2005. Based on the national trend, however, Missouri is moving in the desired downward trend from 37<sup>th</sup> in 2003 to 32<sup>nd</sup> in 2004. Focused law enforcement efforts, engineering safety enhancements and increased public awareness all contribute to the decrease. Safety advocates, organizations and agencies across Missouri have joined together to implement Missouri’s “Blueprint for Safer Roadways.” The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008. Note: Preliminary rate information may change slightly when crash data and VMT are finalized for 2005. National ranking data for 2005 was not available at the time of print.



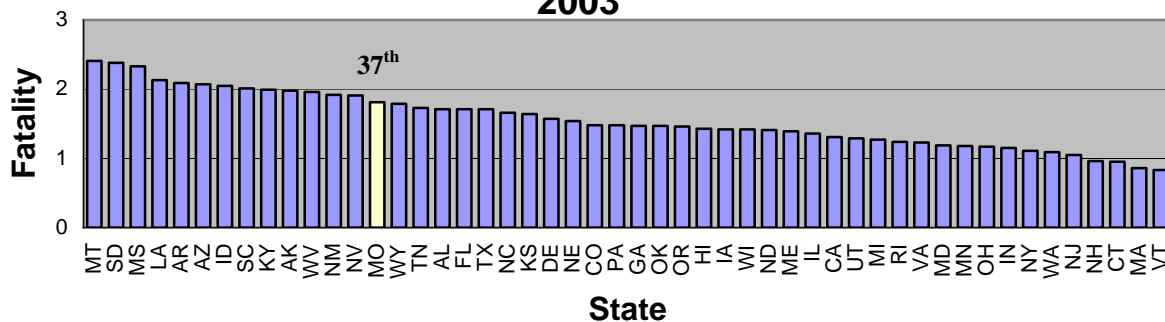
### Missouri's National Ranking in State Fatality Rates (per 100 Million VMT)

2004



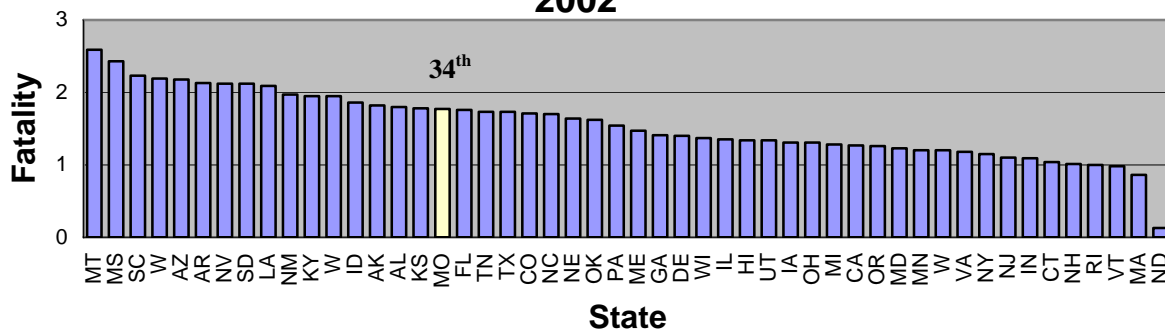
### Missouri's National Ranking in State Fatality Rates (per 100 Million VMT)

2003



### Missouri's National Ranking in State Fatality Rates (per 100 Million VMT)

2002



## Safe Transportation System

### *Percent of safety belt/passenger vehicle restraint use*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

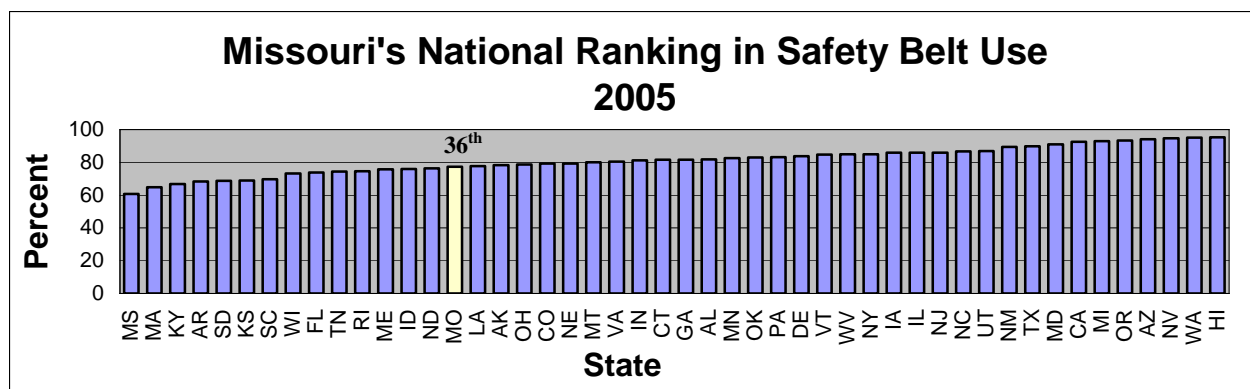
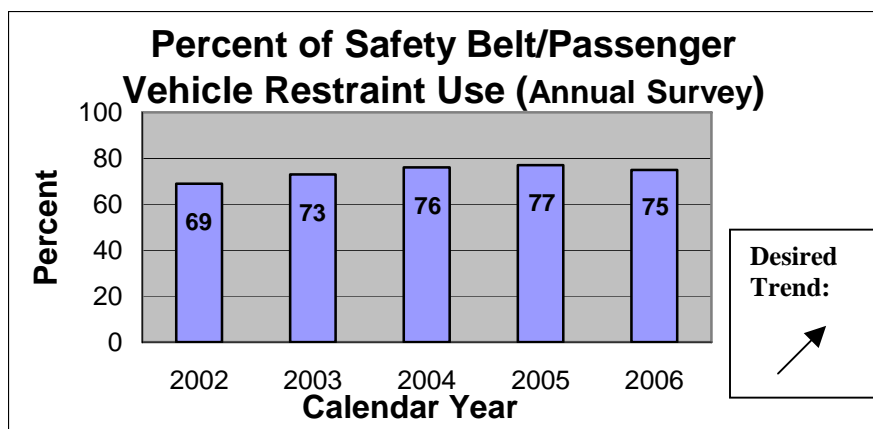
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This measure will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways”, toward efforts that reduce the number of fatalities and injuries on all Missouri roads.

**Measurement and Data Collection:**

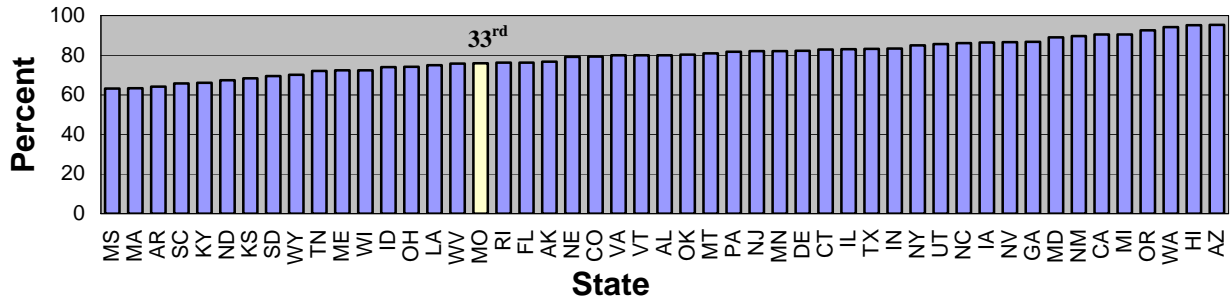
Every June, a statewide survey is conducted at 460 pre-selected locations in 20 counties. The data collected at these sites is calculated into a safety belt usage rate by using a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state’s population. The data collection plan is the same each year for consistency and compliance with the National Highway Traffic Safety Administration guidelines.

**Improvement Status:**

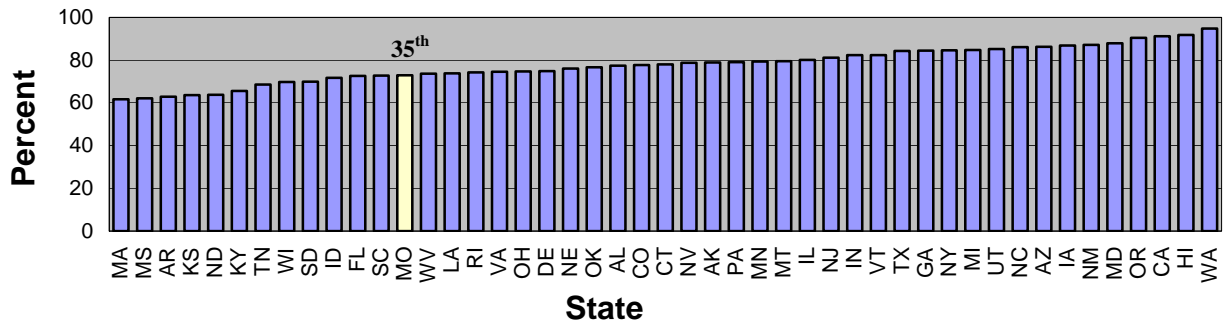
Safety belt use in Missouri increased eight percent from 2002 through 2005 but decreased by two percent in 2006. In the 2005 National comparison, Missouri ranked 36<sup>th</sup> in safety belt usage as compared to other states. Missouri’s eight percent increase from 2002 to 2005 is largely due to increased public awareness and law enforcement participation in the national “Click it or Ticket” campaign. A program beginning in 2005, focused on teen safety belt usage also proved to be successful in increasing use among teenagers. MoDOT continues to promote the need for a primary seat belt law in Missouri. The national ranking data for 2006 was not available at the time of print.



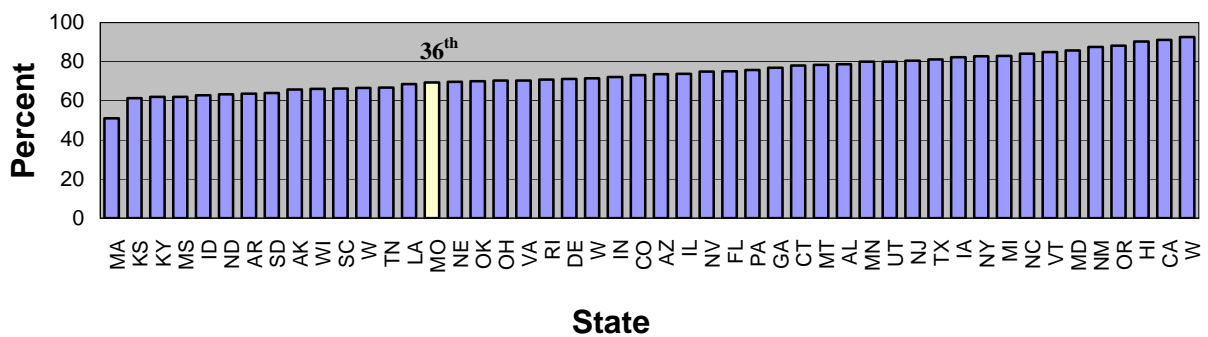
### Missouri's National Ranking in Safety Belt Use 2004



### Missouri's National Ranking in Safety Belt Use 2003



### Missouri's National Ranking in Safety Belt Use 2002



## Safe Transportation System

### *Number of bicycle and pedestrian fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

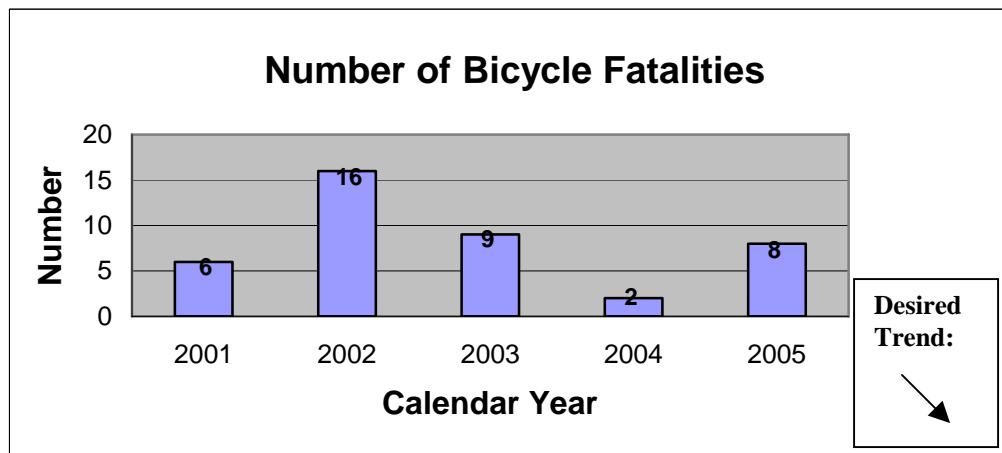
This measure tracks annual trends in fatalities and disabling injuries resulting from motor vehicle crashes with bicycles and pedestrians in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways”, toward efforts that reduce fatalities and injuries on all Missouri roads.

**Measurement and Data Collection:**

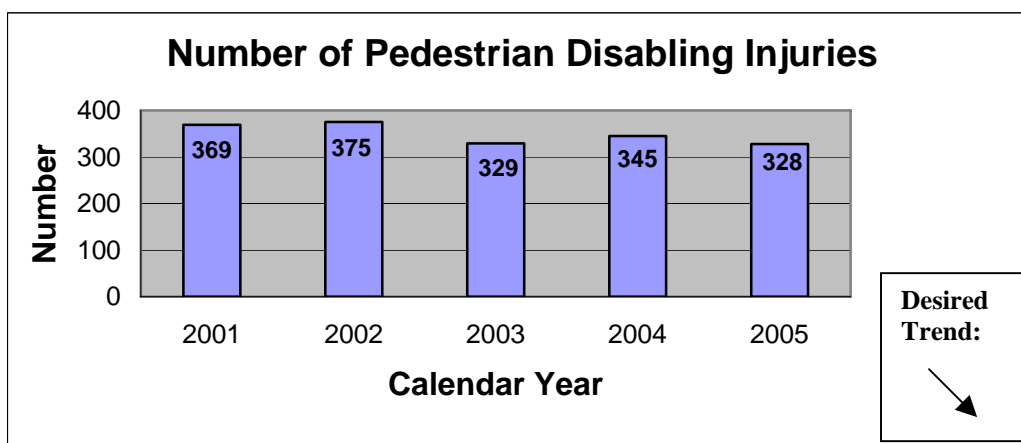
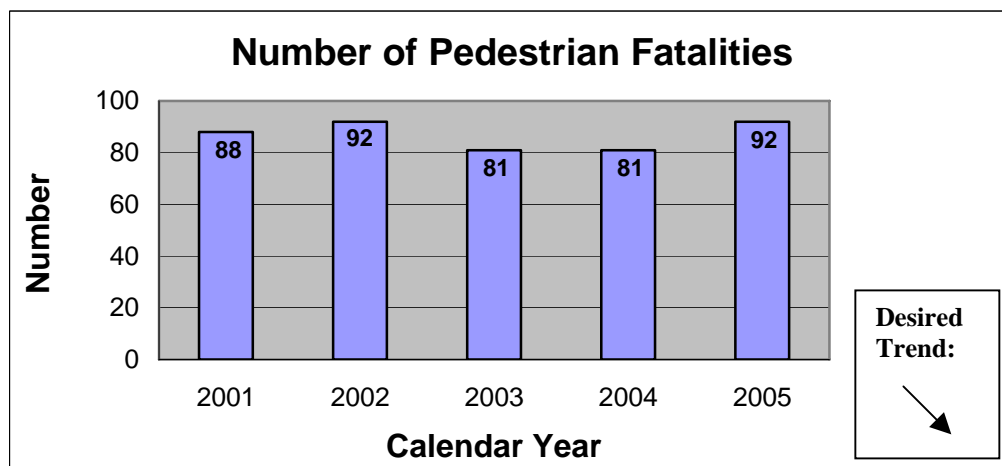
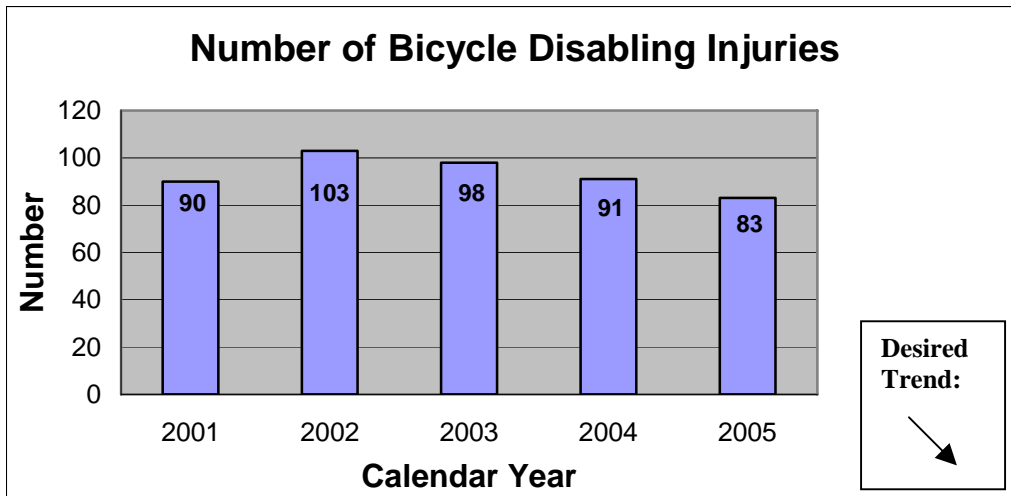
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

**Improvement Status:**

This data reflects the number of fatalities and disabling injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. Pedestrian fatalities and disabling injuries also are on a downward trend due to improved crosswalks and signaling. Safety advocates, organizations and agencies across Missouri have joined together to implement Missouri’s “Blueprint for Safer Roadways.” The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008. Funds have been dedicated to the St. Louis and Kansas City regions in support of pedestrian safety under the Blueprint.







## Safe Transportation System

### *Number of motorcycle fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

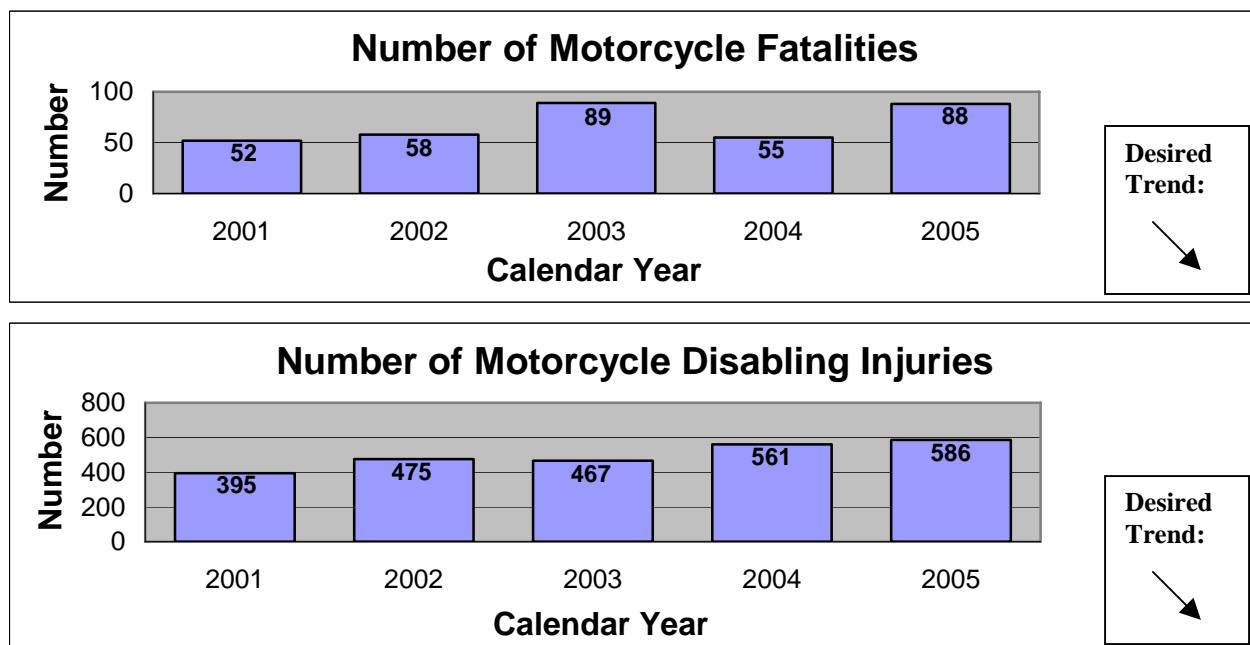
This measure tracks annual trends in fatalities and disabling injuries resulting from motorcycle crashes in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the “Blueprint for Safer Roadways”, toward efforts that reduce fatalities and disabling injuries on Missouri’s roadways.

**Measurement and Data Collection:**

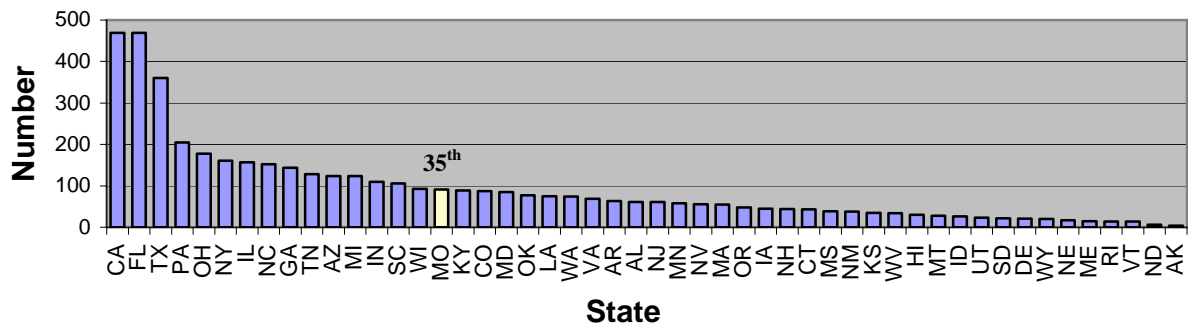
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

**Improvement Status:**

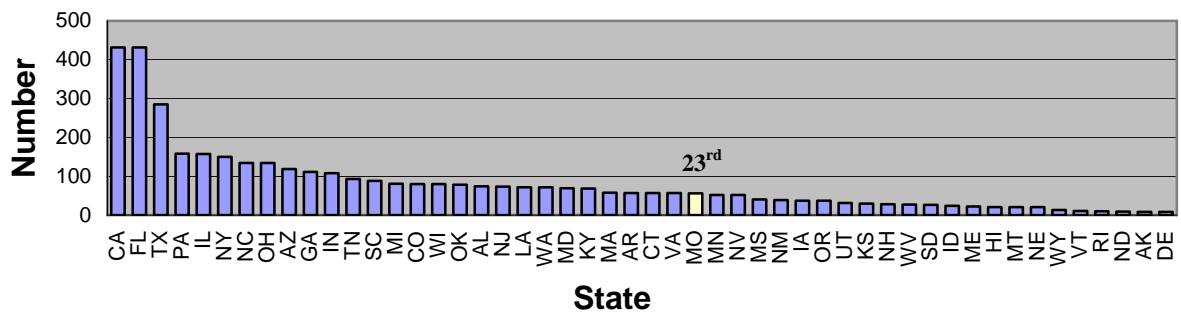
Fatalities and disabling injuries have shown an upward trend over the past four years. Missouri’s national ranking in the total number of motorcycle fatalities has worsened from 23<sup>rd</sup> in 2004 to 35<sup>th</sup> in 2005. A significant increase in the number of licensed motorcycles and riders has increased the exposure rate. Rider education classes are offered within one hours driving time throughout Missouri. More than 4,000 riders at 28 sites are trained each year. Twenty-four new instructors are also trained each year. Safety advocates, organizations and agencies across Missouri have joined together to implement Missouri’s “Blueprint for Safer Roadways”. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008. A motorcycle subcommittee has been formed and has developed a strategic plan to address the problem in Missouri.



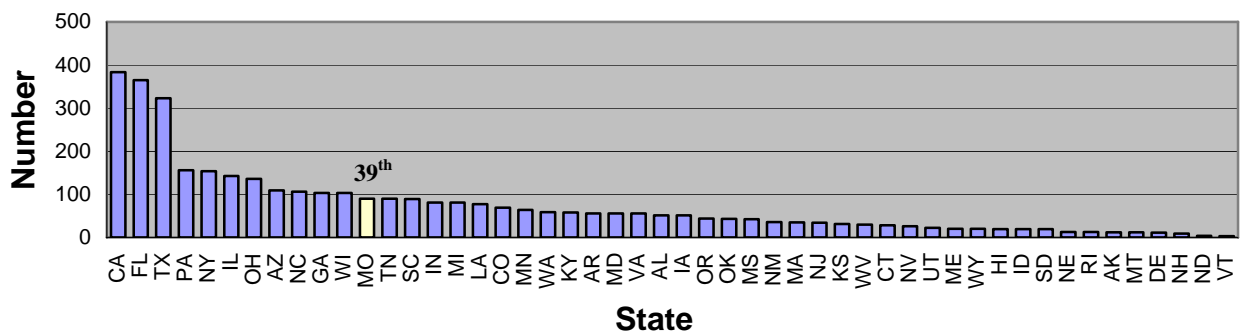
### Missouri's National Ranking in Motorcycle Fatalities 2005



### Missouri's National Ranking in Motorcycle Fatalities 2004



### Missouri's National Ranking in Motorcycle Fatalities 2003



## Safe Transportation System

### *Number of commercial motor vehicle crashes resulting in fatalities*

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Charles Gohring, Motor Carrier Services Program Manager

**Purpose of the Measure:**

This measure tracks the number of commercial motor vehicles involved in fatal crashes each year. MoDOT uses the information to target educational and enforcement efforts.

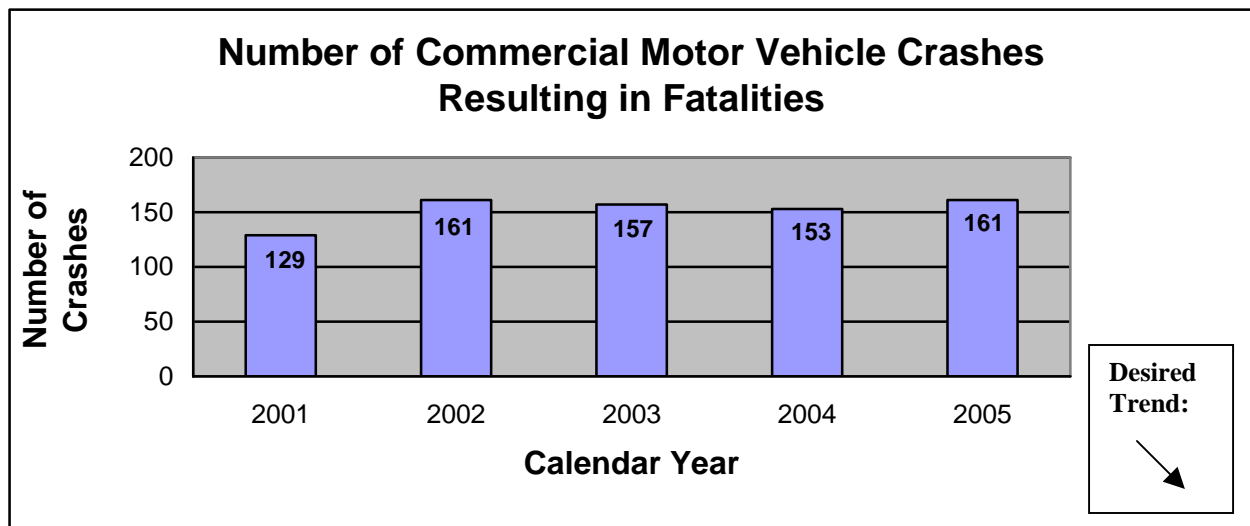
**Measurement and Data Collection:**

The Missouri State Highway Patrol collects and records the crash statistics used in this measure. The data used in this measure reports the number of commercial motor vehicles involved in a crash where one or more people die within 30 days as a result of the crash.

**Improvement Status:**

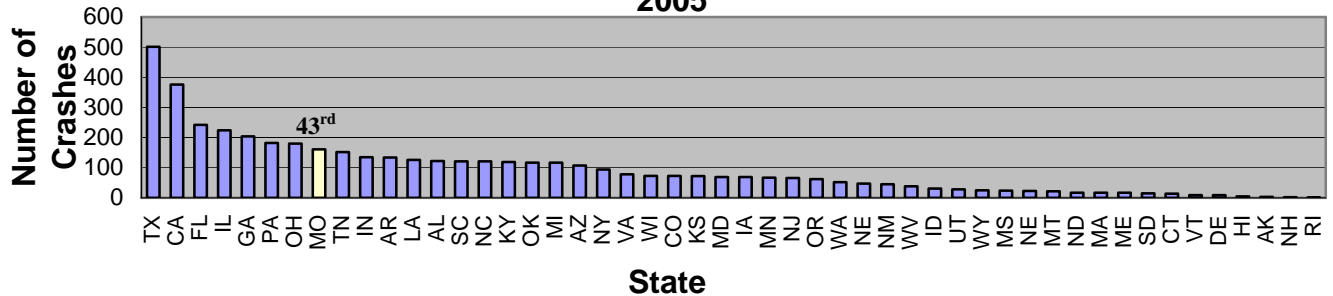
Between 2002 and 2004, the number of Missouri commercial motor vehicle fatal crashes slowly dropped from 161 to 153. In 2005, the number increased by eight to 161. MoDOT coordinates its efforts with those of the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

Missouri ranked 43<sup>rd</sup> in the number of fatality crashes nationwide in 2005.



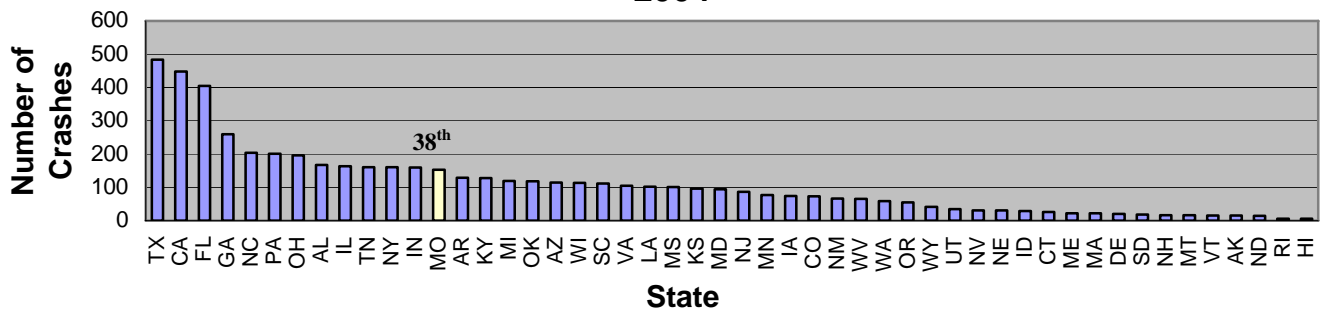
### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes

2005



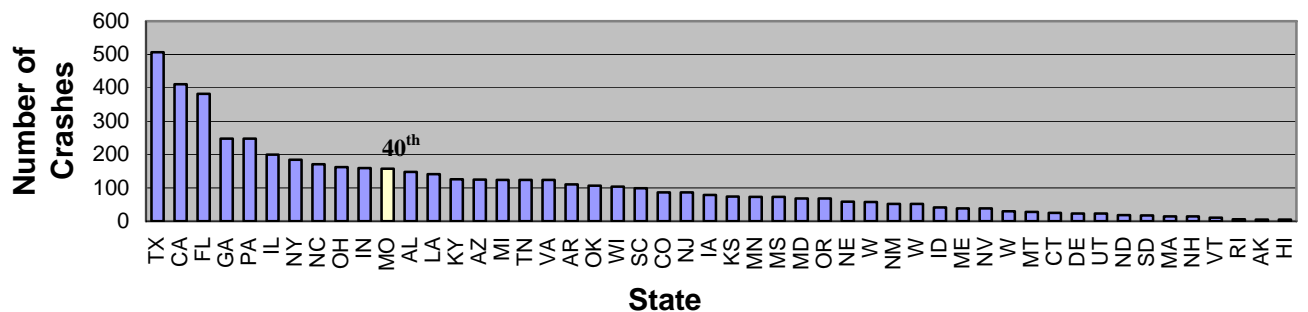
### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes

2004



### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes

2003



## Safe Transportation System

### *Number of commercial motor vehicle crashes resulting in injuries*

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Charles Gohring, Motor Carrier Services Program Manager

**Purpose of the Measure:**

This measure tracks number of commercial motor vehicles involved in injury crashes each year. MoDOT uses the information to target educational and enforcement efforts.

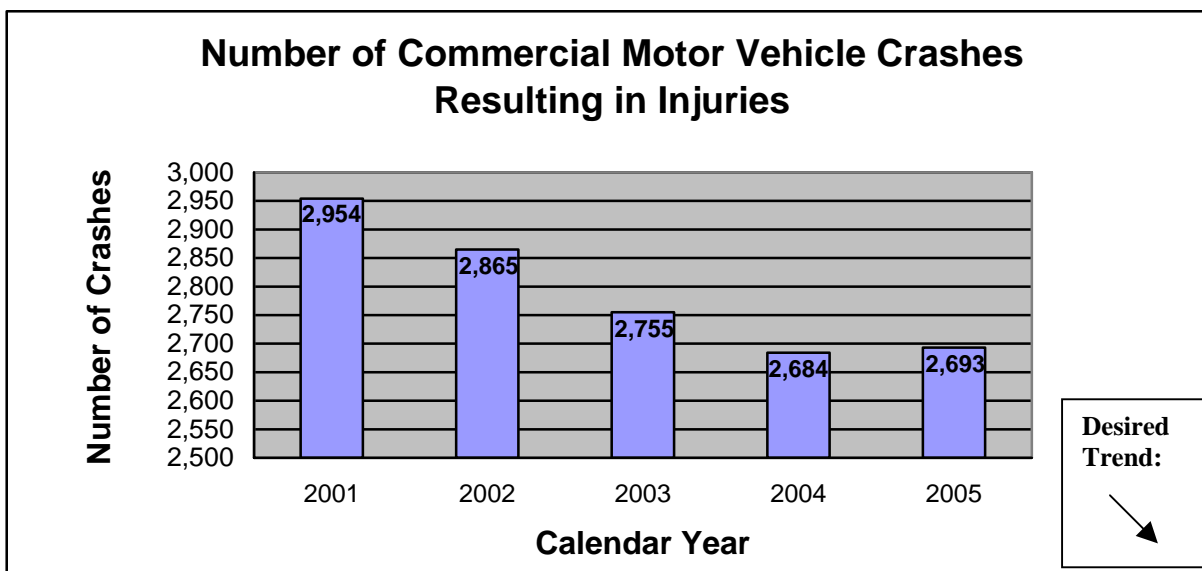
**Measurement and Data Collection:**

The Missouri State Highway Patrol collects and records crash statistics. The data for this measure reflects the number of commercial motor vehicles involved in crashes where one or more people are injured.

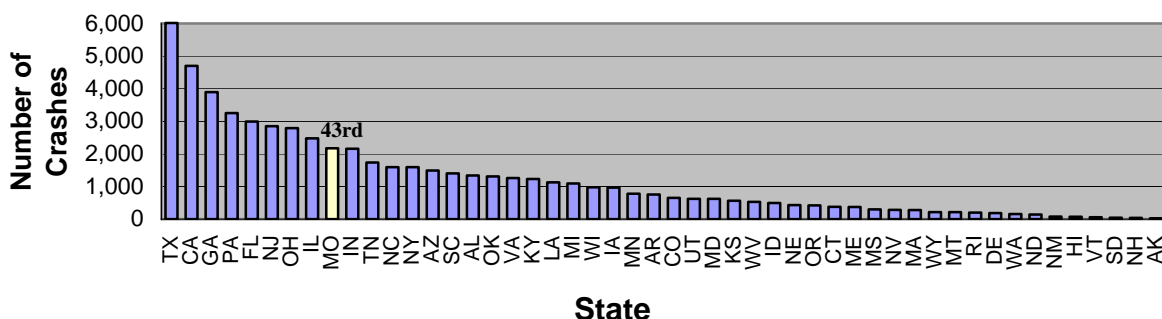
**Improvement Status:**

Between 2001 and 2004, the number of commercial motor vehicle crashes resulting in injuries decreased. In 2005, the trend turned slightly as injury crashes increased by nine over the 2004 total. The overall downward trend is due to the coordinated safety efforts of MoDOT, the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division, and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, rumble stripes, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The Missouri State Highway Patrol, St. Louis and Kansas City police departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

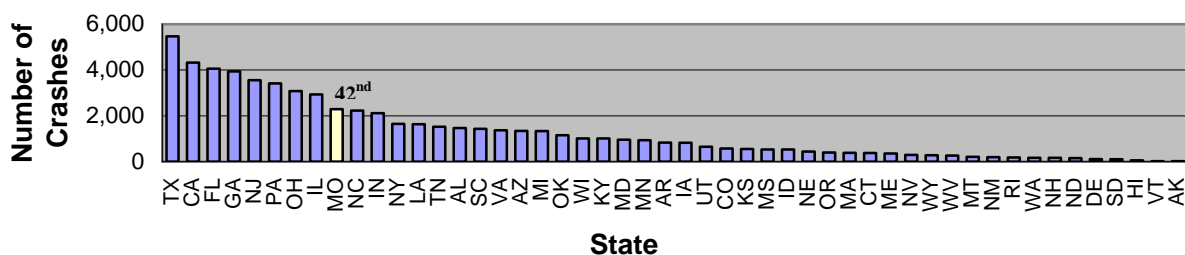
Missouri ranked 43<sup>rd</sup> in the number of injury crashes nationwide in 2005.



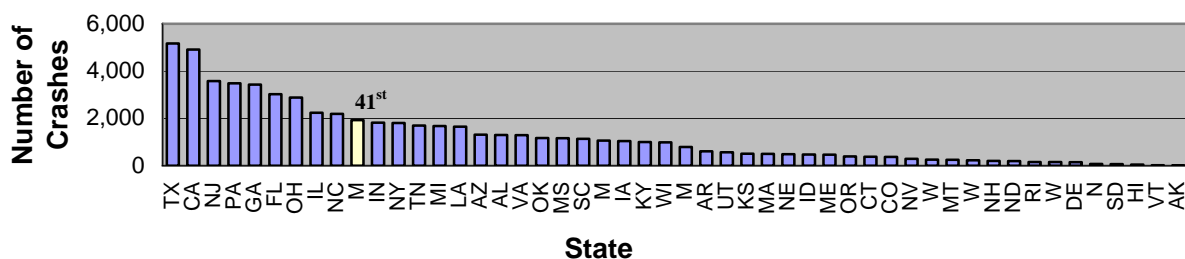
### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes 2005



### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes 2004



### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes 2003



## Safe Transportation System

### *Number of fatalities and injuries in work zones*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Scott Stotlemeyer, Technical Support Engineer

**Purpose of the Measure:**

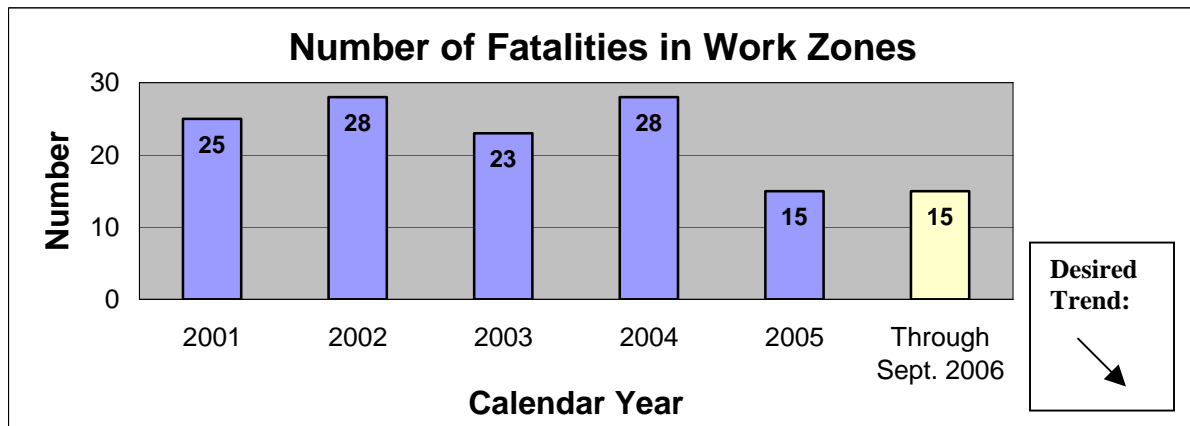
An important factor in evaluating the safety of Missouri's transportation system is determining the safety of work zones on the state's roads. This measure tracks the number of injuries and fatalities occurring as a result of a traffic crash in a work zone on any state route.

**Measurement and Data Collection:**

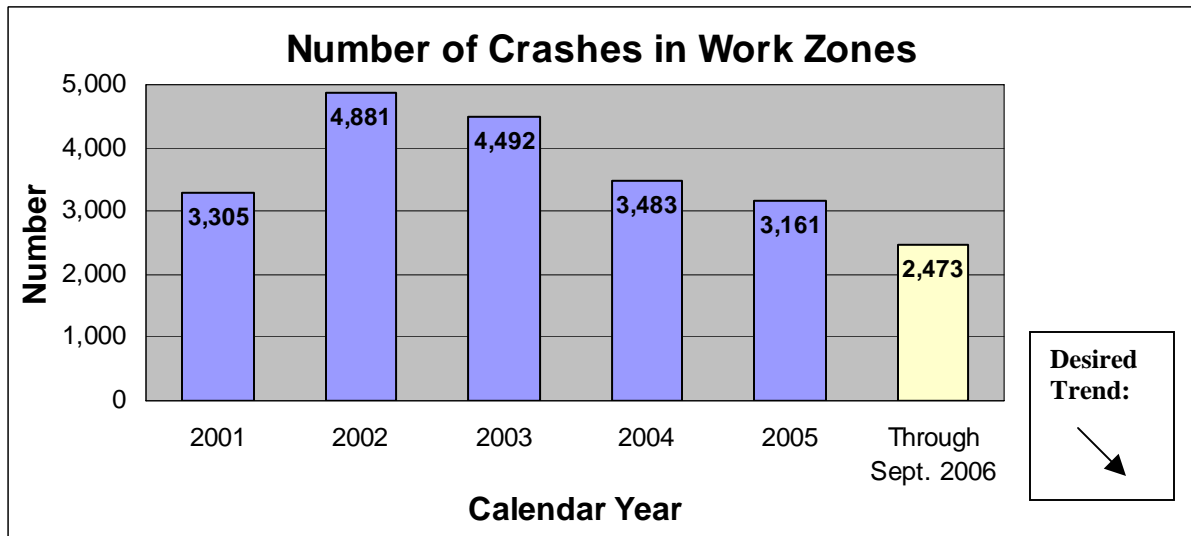
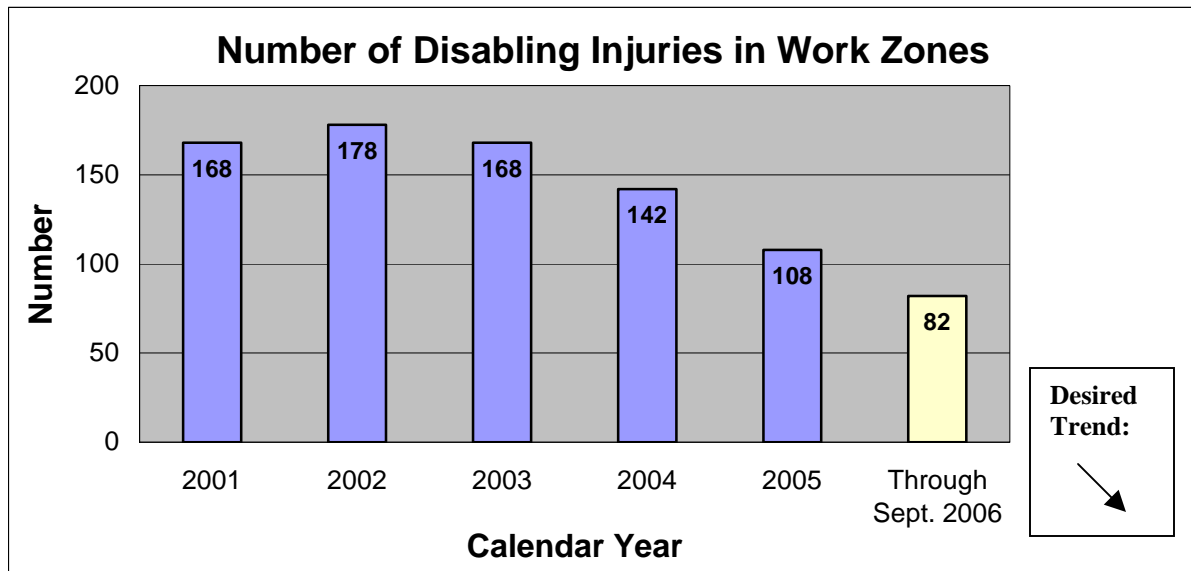
Law enforcement agencies in Missouri are required to report crashes by submitting a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide crash database. MoDOT staff looks at this data to identify work zone-related injuries and fatalities.

**Improvement Status:**

Since 2002, when Missouri traffic safety representatives reformatted the accident report form and MSHP conducted extensive training to emphasize work zones, the number of work zone-related crashes, disabling injuries, injuries and fatalities has generally decreased over consecutive years. This reduction, despite increasing traffic demand on the transportation system and a growing state highway construction program, results from the department's proactive approach to raising work zone safety awareness and minimizing impacts on the traveling public.







## Safe Transportation System

### *Number of highway-rail crossing fatalities and collisions*

**Results Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rod Massman, Administrator of Railroads

**Purpose of the Measure:**

This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at public railroad crossings in Missouri. It will help drive the highway safety plan, which supports the *Blueprint for Roadway Safety*, in efforts that reduce the number of fatalities, collisions and injuries at Missouri's public highway-rail crossings.

**Measurement and Data Collection:**

MoDOT collects crash data and enters it into a railroad safety information system used to update MoDOT's traffic management system. This does not include fatalities or collisions from those on railroad property at areas other than at public railroad crossings, which are tabulated separately. Missouri is then ranked with all other states using data from the Federal Railroad Administration that consists of the numbers of collisions and fatalities in each state.

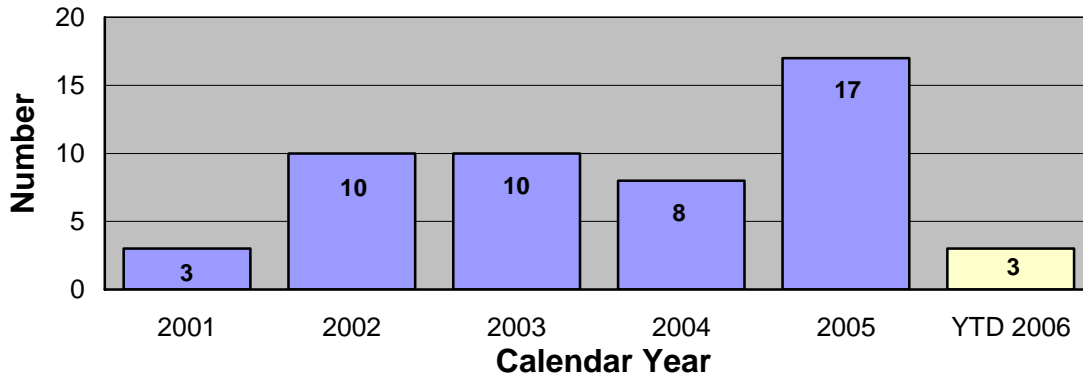
**Improvement Status:**

MoDOT continues to coordinate its railroad crossing projects in the areas of greatest need using a safety exposure index, in addition to focusing on crossings with a history of accidents or limited sight distance. By agreeing with the railroads to look at a defined area, called a corridor, and sharing financial responsibilities for improvements, limited funds can be spread over a wider area. This increases the number of overall projects completed in specific areas of the state.

Other improvements include an increased emphasis on and MoDOT employee participation in public outreach opportunities on rail safety in conjunction with Operation Lifesaver, Inc. Another improvement is the exploration of partnerships with other units of government such as state agencies, cities and school districts to upgrade flasher-only crossings to crossings with both lights and gates. There are explorations of other partnerships where state and federal funds alone would not be enough to complete the projects. There is also a renewed emphasis on closing redundant or unnecessary crossings.

Thus far in 2006, there have been fewer fatalities and collisions than in calendar year 2005. Compared with 2005, fatalities to date are down by 60 percent; however, collisions are about even with last year. MoDOT was recently granted increased funding for the next federal fiscal year beginning October 1, 2006, that will increase MoDOT's and Operation Lifesaver's rail/highway safety efforts. Plans for the use of the funding are underway.

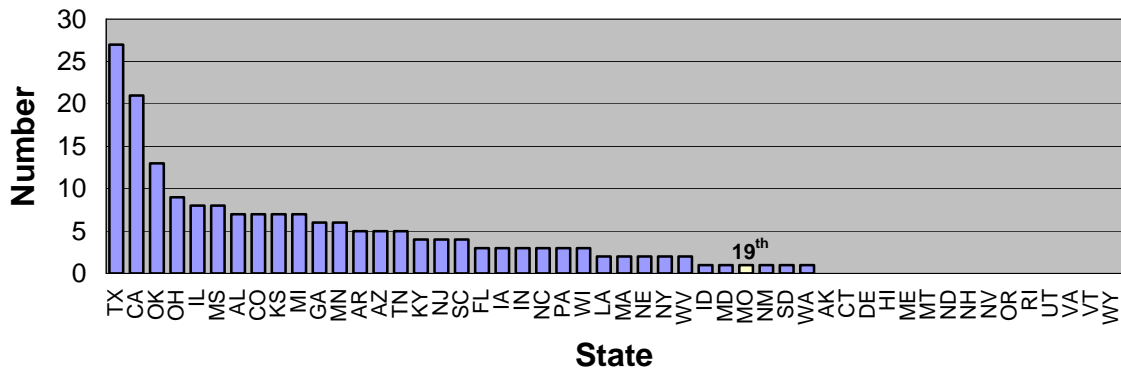
### Number of Highway-Rail Crossing Fatalities in Missouri



Desired Trend:



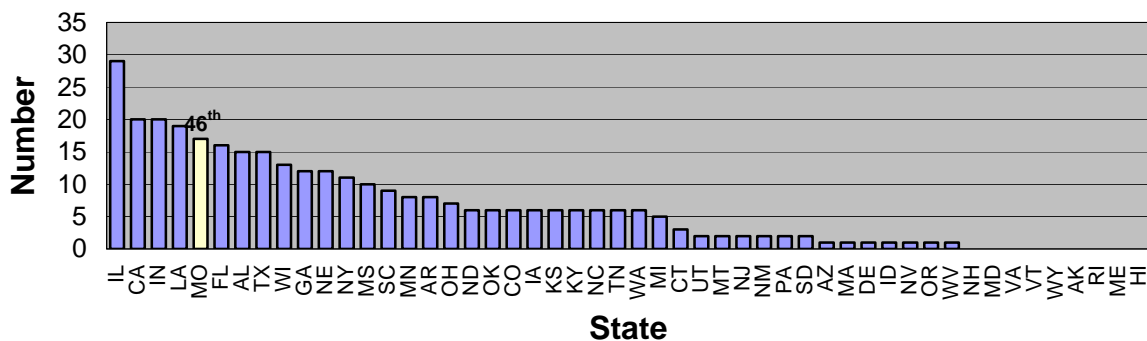
### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January-July 2006



Desired Trend:



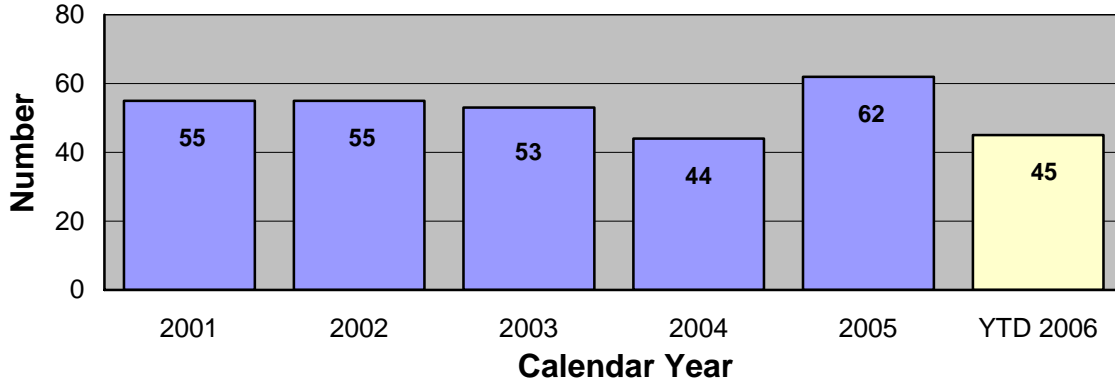
### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January-December 2005



Desired Trend:



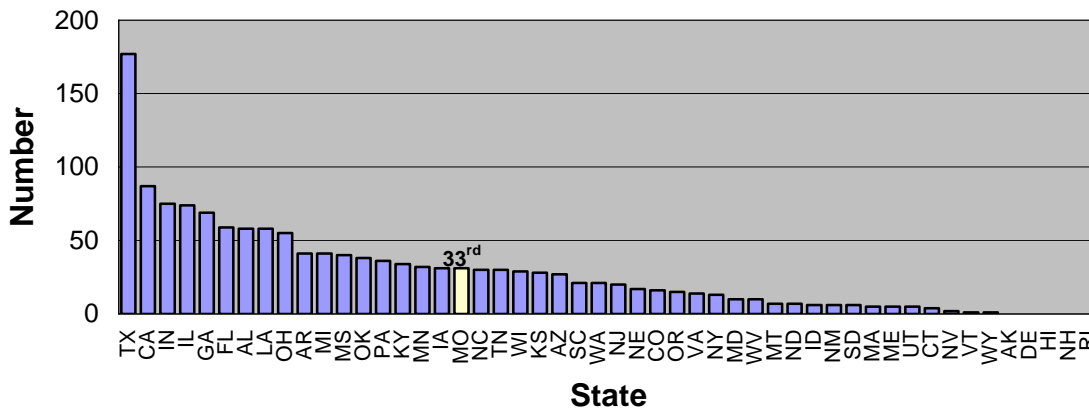
### Number of Highway-Rail Crossing Collisions in Missouri



Desired  
Trend:



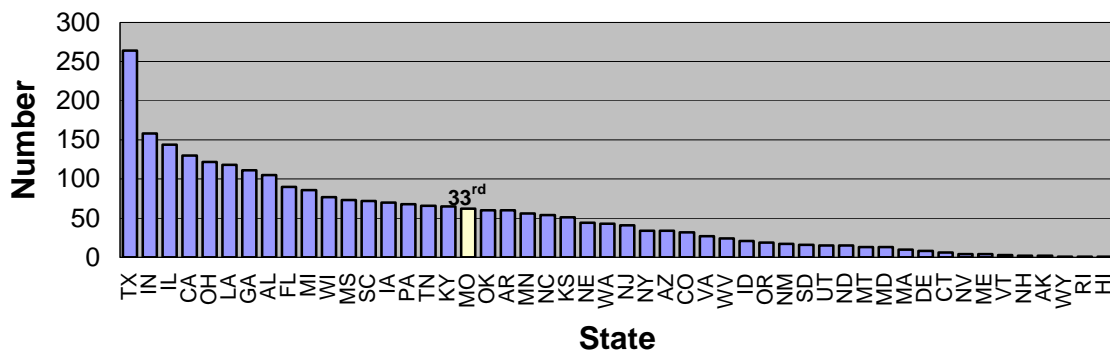
### Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-July 2006



Desired  
Trend:



### Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-December 2005



Desired  
Trend:

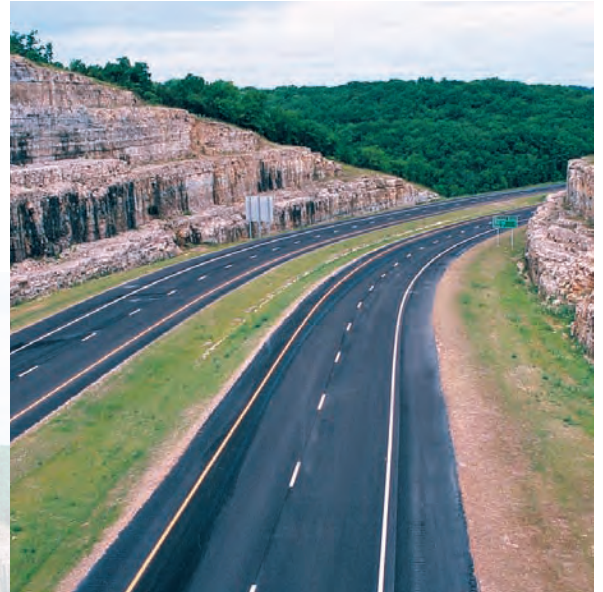
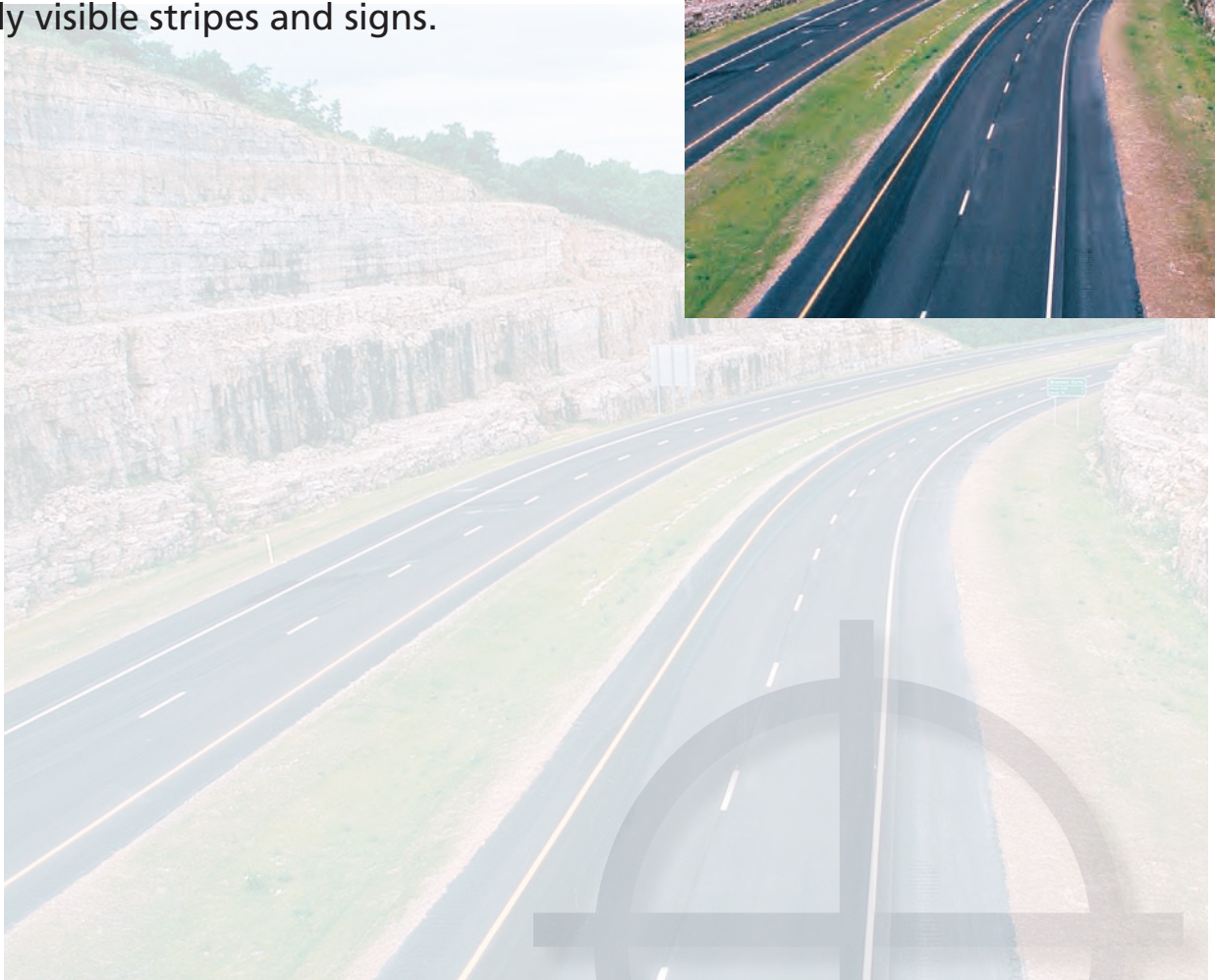


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# Roadway Visibility

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Good roadway visibility in all weather and light conditions is critical to safe and efficient travel. MoDOT will delight its customers by using top-quality and highly visible stripes and signs.



## Roadway Visibility

### *Rate of nighttime crashes*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

**Purpose of the Measure:**

This measure tracks the types of crashes where visibility of stripes and signs may be a contributing factor.

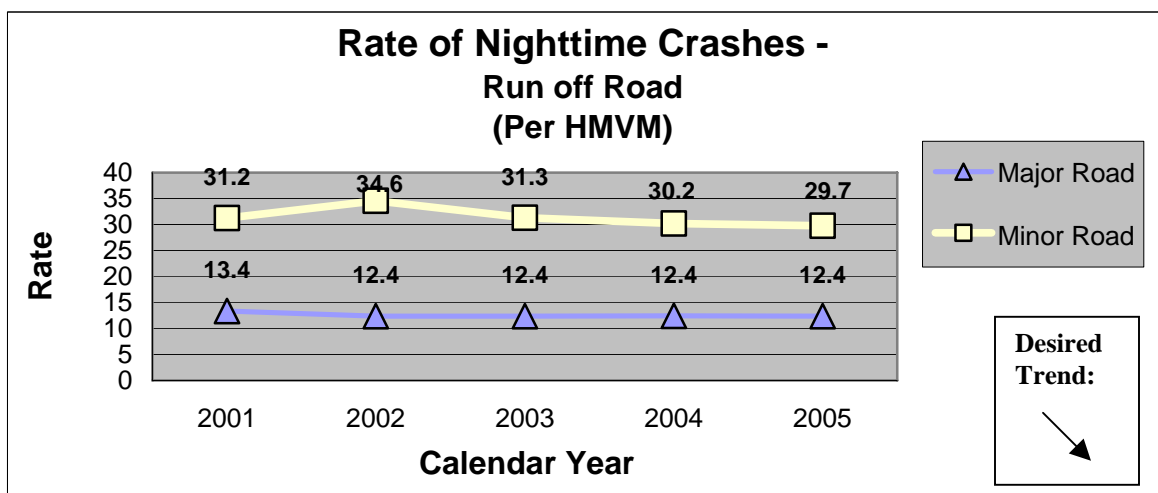
**Measurement and Data Collection:**

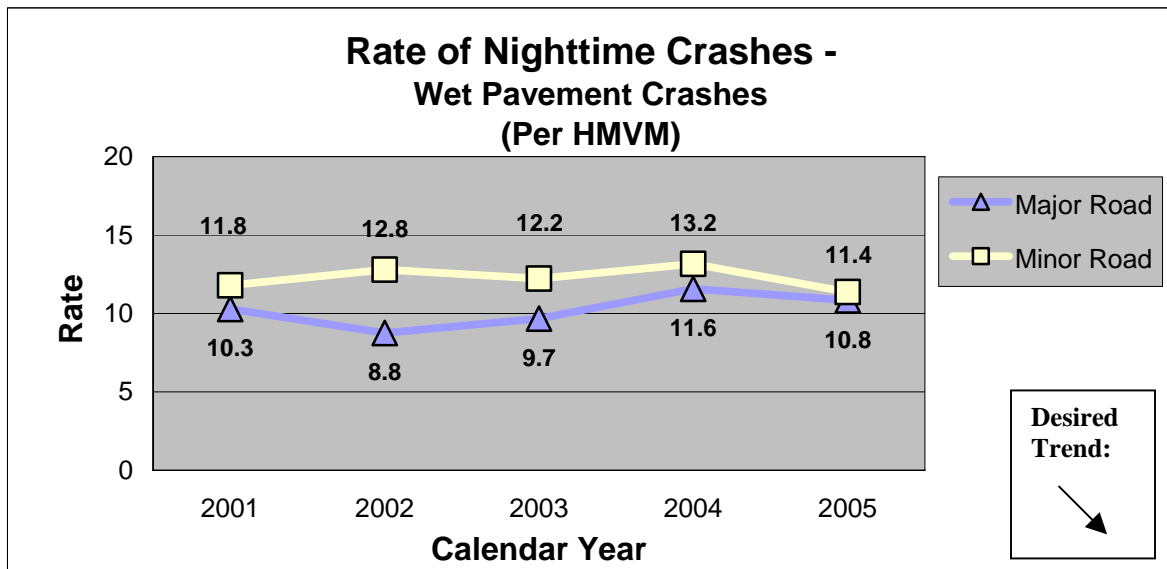
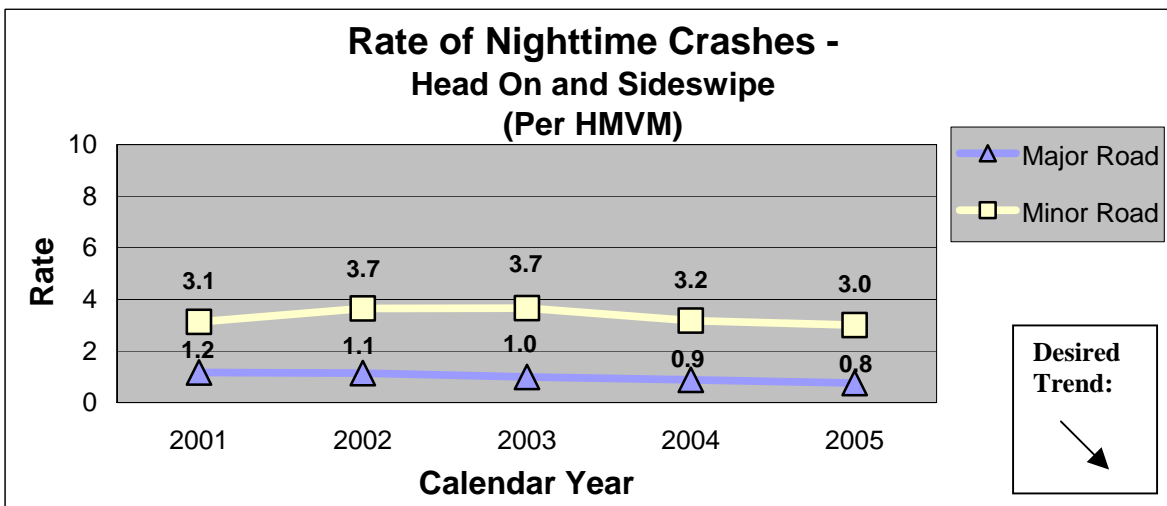
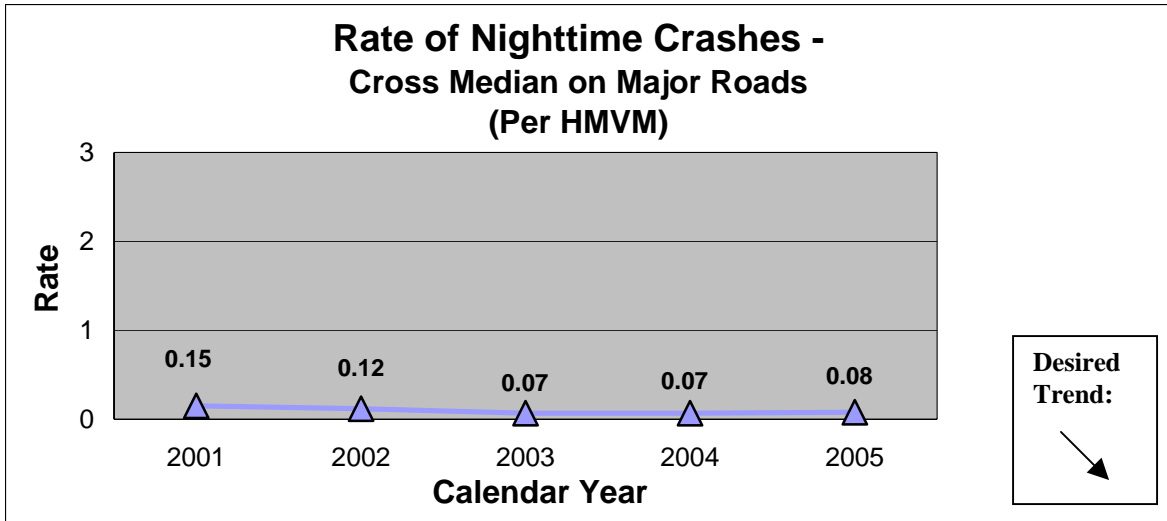
To measure the rate of nighttime crashes, data is collected from the statewide crash database and crashes that occur during night conditions are identified. Further filtering of the data divides these night crashes by major and minor roadways. Major roadways are generally used for statewide or interstate travel and minor roadways are generally used for local traffic needs. Crash rates are calculated using the Average Annual Daily Traffic counts and are expressed in the unit, per 100 million vehicle miles (HMVM), which is the national standard for expressing crash rates.

**Improvement Status:**

Major and minor road crashes have decreased slightly since 2001, except wet pavement crashes. Wet pavement crashes increased slightly for major roads and remained virtually flat for minor roads from 2001 to 2004. However, the recent trend for wet pavement-related crashes on both major and minor roads has decreased.

In 2005, MoDOT implemented a new pavement marking system to improve nighttime and wet pavement visibility. On major roads this new system includes highly reflective pavement marking tape, edgeline rumble stripes and delineation of guard cable and guardrail. Last year, almost 500,000 feet of highly reflective pavement tape was installed on Smooth Road Initiative routes. Contracts for the delineation of guard cable and guard rail on SRI routes have all been awarded.





## Roadway Visibility

### *Percent of signs that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

**Purpose of the Measure:**

This measure will track whether the department's sign policy and the design standards, and sign replacement policy is resulting in visible signs that meet customers' expectations.

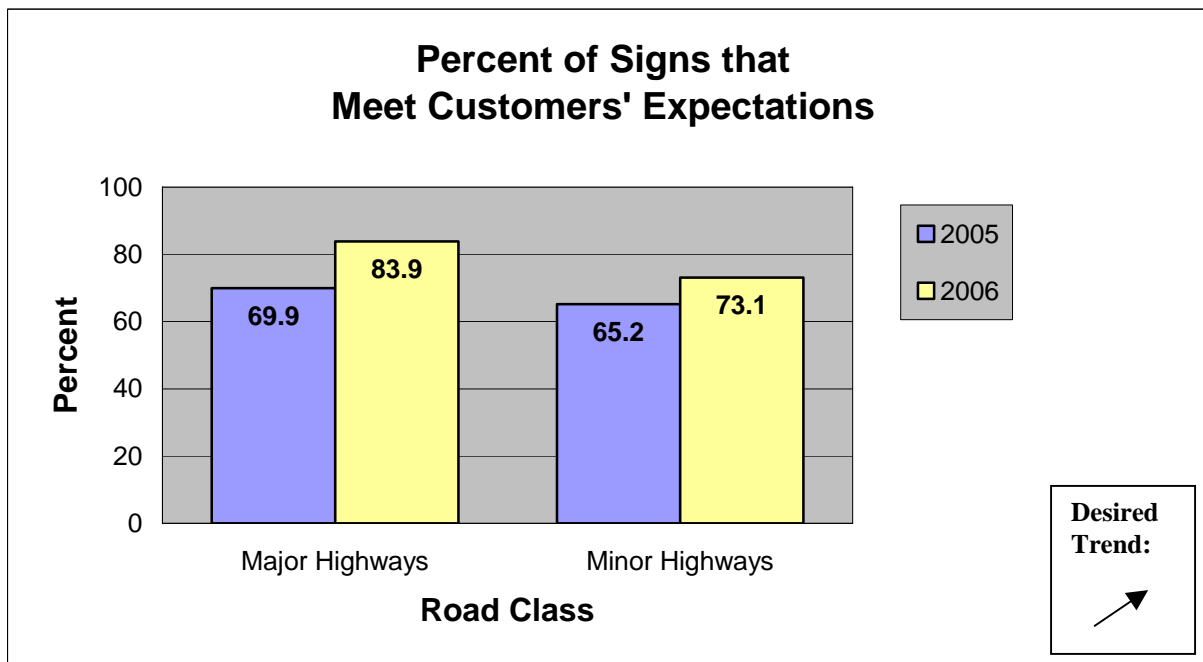
**Measurement and Data Collection:**

Sign-quality attributes that define user expectations have been developed based on an industry-wide literature review. The attributes selected for this measure are those that can be captured during a night sign log. A night sign log is conducted by MoDOT employees driving a road at night, recording the location and condition of the signs, particularly how visible the signs are with headlights. Data for this measure is collected by doing night sign logs on randomly generated road segments. The data collection is done annually in the fall by MoDOT employees.

**Improvement Status:**

The data shows a 14 percent increase in the percent of signs on the major highways that are meeting customer expectations. Through the Smooth Roads Initiative, MoDOT is replacing many of the signs on the major roads. With the continued emphasis on improving the major roads within the next five years, and the proposed 10-year replacement program for signs on major roads, results should continue to improve.

The data also shows an eight percent increase in the signs on the minor highways meeting customer expectations. MoDOT has implemented a program to upgrade curve signing. This program has improved and will continue to improve a significant portion of the signs on minor roads. In addition, the proposed 12-year replacement program for signs on minor roads should continue to improve the results.





## Roadway Visibility

### *Percent of stripes that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Brocksmith, Technical Support Engineer

**Purpose of the Measure:**

This measure tracks whether MoDOT's striping policy, processes and materials used are resulting in visible stripes that meet customers' expectations.

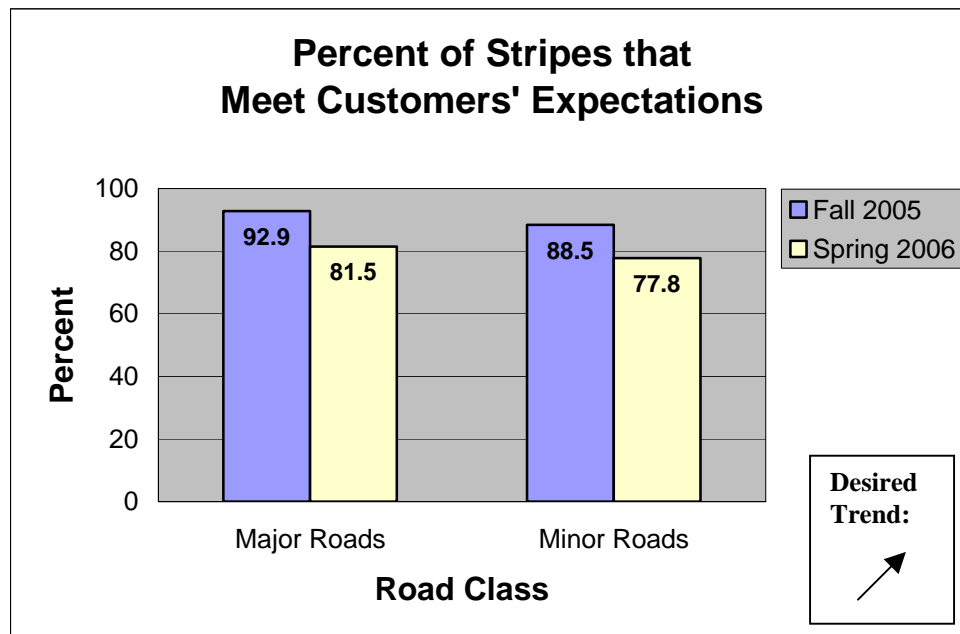
**Measurement and Data Collection:**

Striping quality attributes that define user expectations have been developed based on an industry-wide literature review. The attribute selected for this measure is the retroreflectivity of the striping or the visibility of the striping at night. Retroreflectivity is measured by the amount of light from vehicle headlights that is returned to the driver. Data is collected by taking retroreflectivity readings on random road segments. MoDOT has a contractor collecting this data in the fall and spring of each year.

**Improvement Status:**

The data collected from the contractor was analyzed in respect to the benchmarks MoDOT set as the minimum acceptable level of retroreflectivity. The fall readings were taken before the end of the 2005 striping season. Spring readings were taken in May, early in the striping season, to reflect the condition of the markings coming out of the winter when they are typically the poorest. There was an average 12 percent reduction in the stripes meeting customer expectations. Reduced striping performance after winter is typical, due to the effects of snowplowing scraping the surface. The winter of 2005-2006 was relatively mild with fewer than normal snowplowing events, the leading cause of wear on striping.

MoDOT has implemented a new plan for striping to improve visibility, which increases the stripe width on major roads from four to six inches. The plan also includes using more-reflective tape on the skips of major divided highways and longer-lasting materials, which will improve the life and appearance of the striping. As the plan is fully implemented during the 2006 striping season, the results should improve.



## Roadway Visibility

### *Percent of work zones meeting expectations for visibility*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Scott Stotlemeyer, Technical Support Engineer

**Purpose of the Measure:**

An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation, and maintenance is the measurement of the effectiveness of the visual guidance provided to the highway user traveling through our work zones. This measure tracks how well the department meets its customer expectations of visibility in work zones on state highways.

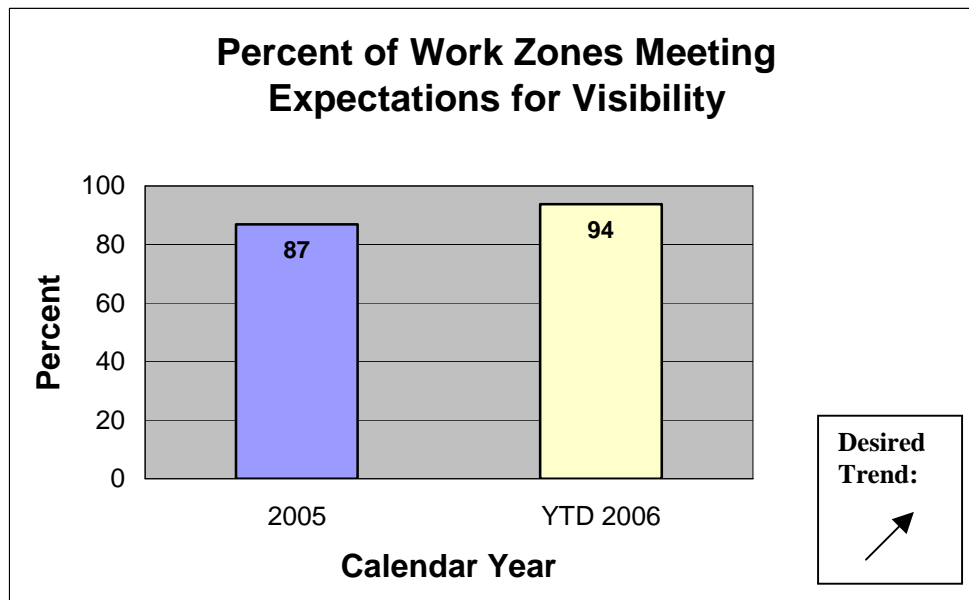
**Measurement and Data Collection:**

Using a formal inspection worksheet, staff from Construction and Materials, Maintenance, Traffic, and the districts evaluate visibility of construction, MoDOT, and permit work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors affecting visibility. The evaluator assigns a pass, fail, or n/a rating to each of these individual factors and a pass or fail rating for their overall perception of the work zone visibility. The overall perception ratings are compiled quarterly and reported via this measurement.

Note: The inspection program began in June 2005.

**Improvement Status:**

The results of the 1,899 inspections this calendar year (235, 759, and 905 in the first three quarters, respectively) show significant progress in this measurement, as the percent of work zones meeting visibility expectations rose by 6.9 percent over calendar year 2005 inspection results. The higher percentage is attributable to the greater emphasis MoDOT has placed on providing quality temporary traffic control installations that effectively direct, guide, and inform users through and around construction and maintenance work zones on the state highway system.



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# Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

*Tangible Result Driver – Shane Peck,  
Community Relations Director*

Responding to customers in a courteous, personal and understandable way is important. MoDOT listens and seeks to understand, because it values everyone's opinion. MoDOT's goal is to delight them with its customer service.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Percent of overall customer satisfaction*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

This measure tracks MoDOT's progress toward the mission of delighting its customers.

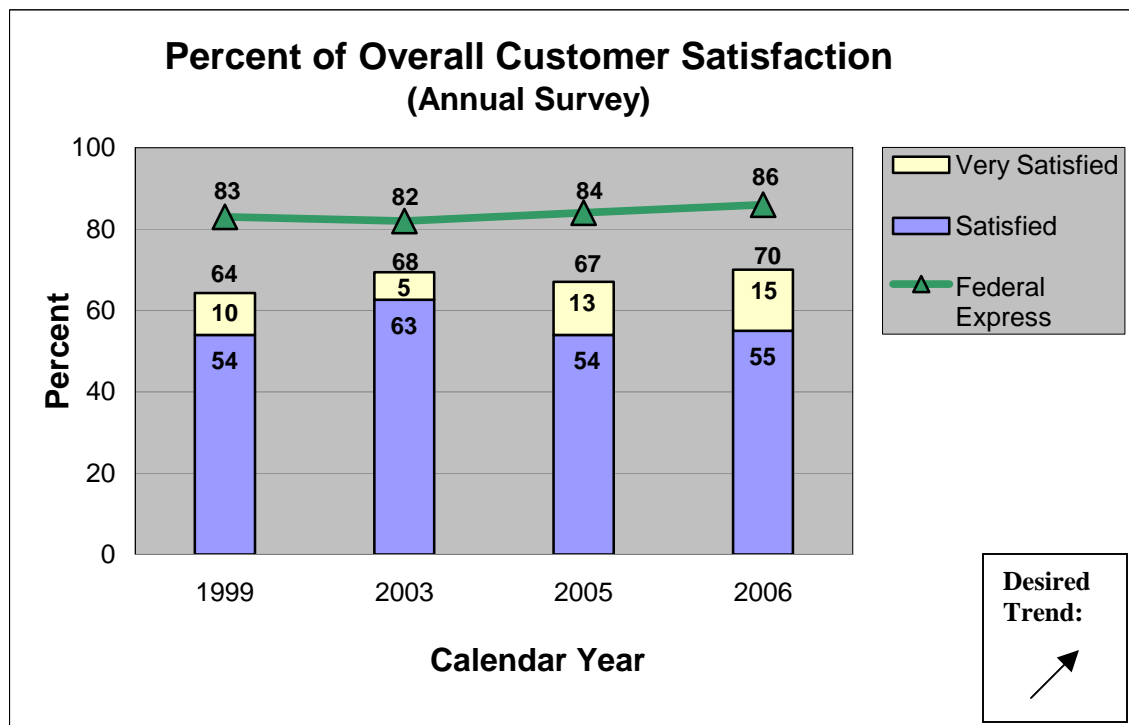
**Measurement and Data Collection:**

Information for this performance measure was collected from Missouri citizens and MoDOT customers in four surveys conducted separately in 1999, 2003, 2005 and 2006. Each survey was conducted by telephone interview with randomly selected Missourians. The most recent information comes from a study commissioned by the Missouri Transportation Institute in May 2006 that asked 3,500 Missourians to rate their satisfaction with MoDOT.

We've targeted Federal Express as the benchmark for this measure. Based on information compiled by the American Customer Satisfaction Index, Federal Express has the highest customer satisfaction rate – 86 percent – out of the 200 companies and government agencies that the ACSI scores. We also continue to research customer satisfaction rates for other state departments of transportation. Some of the findings: Alaska had an 80.3 percent customer satisfaction score in 2005; Virginia had an 82 percent satisfaction rate in 2001.

**Improvement Status:**

This is an annual measure. New data will not be available until May 2007. However, some factors that likely contributed to Missourians' satisfaction with MoDOT during the third quarter of 2006 included the largest construction season ever, with much of the work taking place in July, August and September 2006. The Seat of Your Pants tour, in which department officials spent several months inspecting the progress of the Smooth Roads Initiative work, demonstrated the department's efforts to deliver quality projects on time. This effort received media attention statewide. In addition, plans are under way to improve 800 of our worst bridges in five years under the Safe & Sound Bridge Improvement Plan.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

*Percent of customers who contacted MoDOT that felt they were responded to quickly and courteously with an understandable response*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

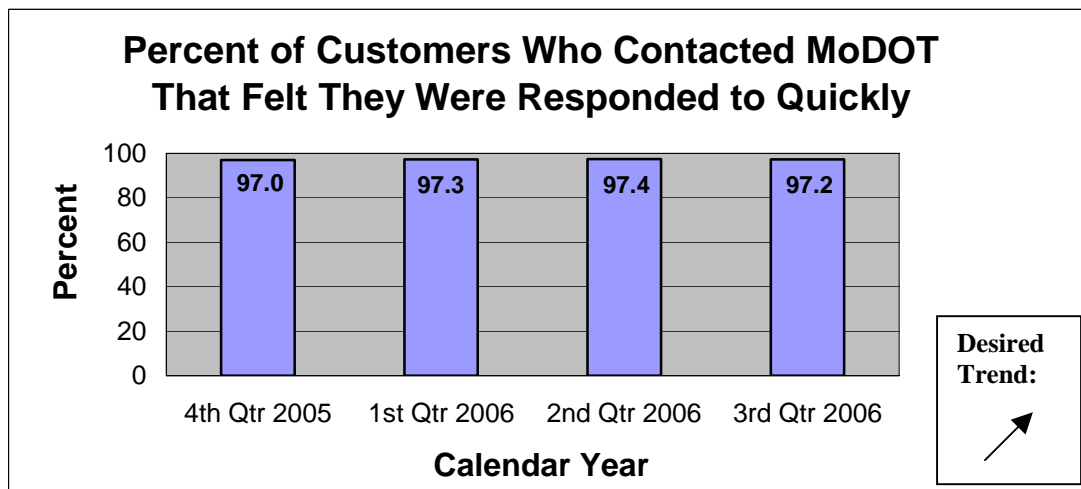
This measure indicates whether customers are comfortable with the speed, courtesy and clarity of MoDOT customer service.

**Measurement and Data Collection:**

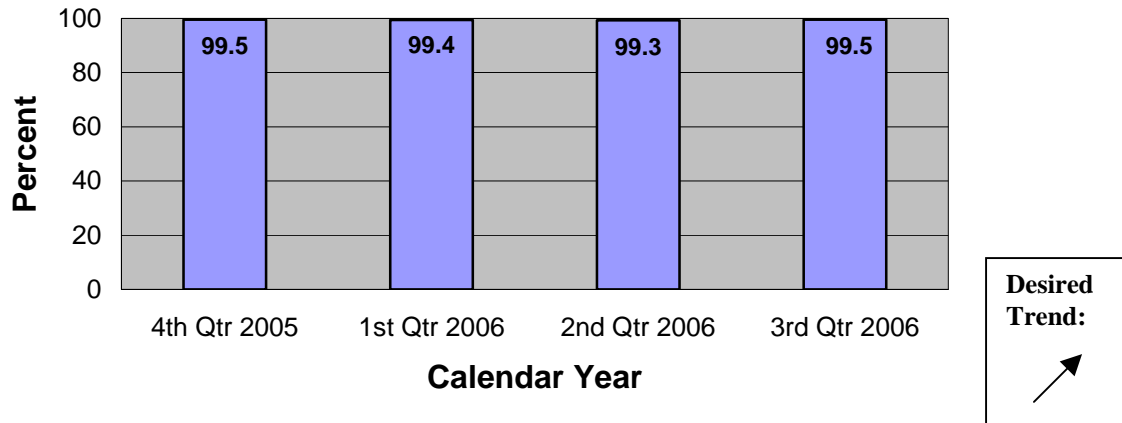
Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representative is complete. Callers who agree are forwarded to an automated survey that asks three “yes or no” questions on the timeliness, accuracy and courtesy of the call.

**Improvement Status:**

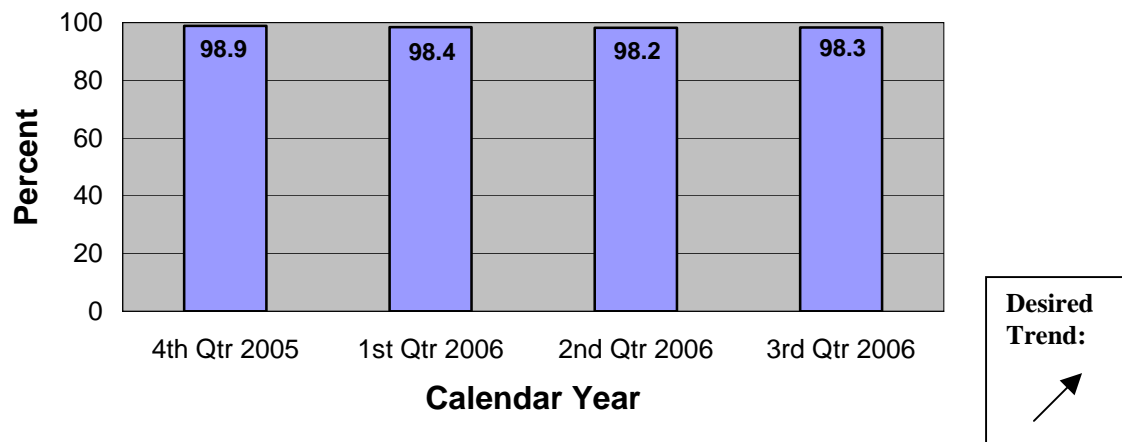
Results continue to be extremely high across the board. This data comes from 6,917 surveys taken in the past quarter – well over the 5,887 surveys in the previous quarter. Satisfaction remains exceptionally high even as survey numbers continue to climb. An updated training manual, as well as ongoing “secret shopper” efforts, encourage continued improvement.



**Percent of Customers Who Contacted MoDOT That  
Felt They Were Responded To In a Personal and  
Courteous Manner**



**Percent of Customers Who  
Contacted MoDOT That Understood  
the Response Given**



## Personal, Fast, Courteous And Understandable Response To Customer Requests (Inbound)

### *Number of customer contacts*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

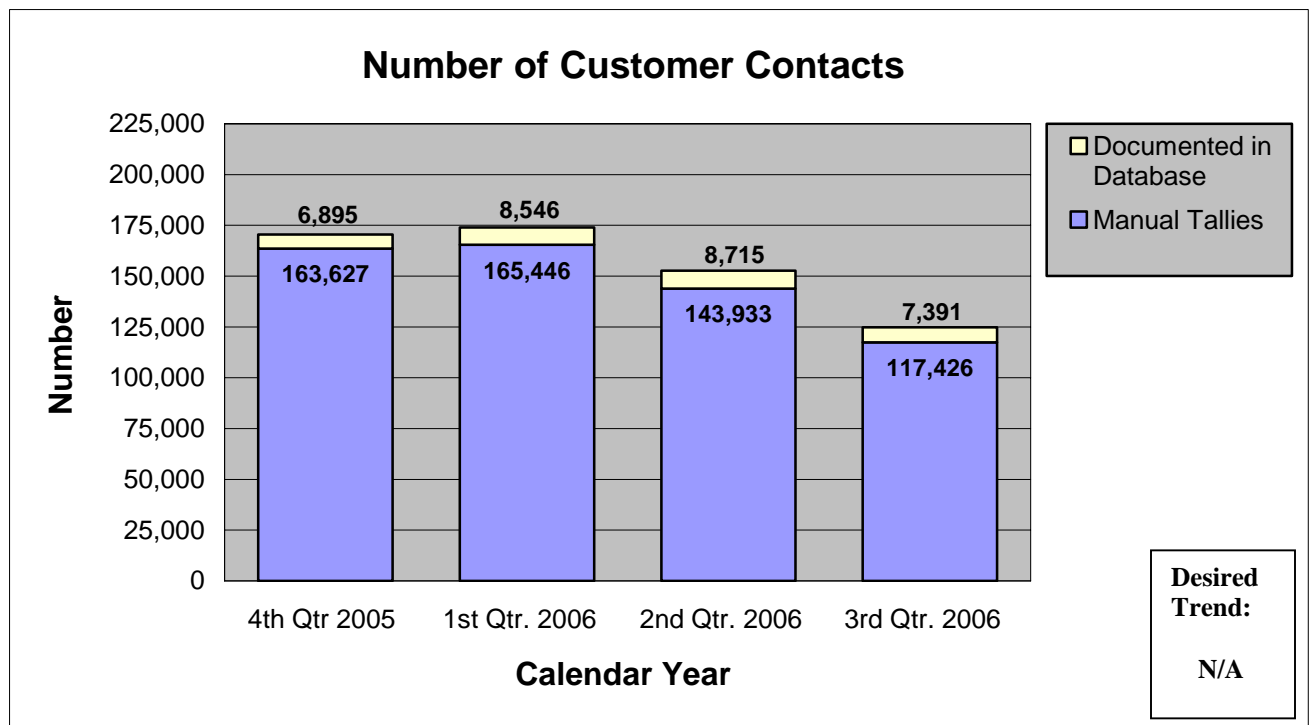
This measure tracks the number of customers who contact MoDOT. A customer contact is defined as any customer who contacts MoDOT via email, telephone, or letter through the customer service centers, Highway Safety, Human Resources, and Motor Carriers.

**Measurement and Data Collection:**

MoDOT has 70 employees whose primary responsibility is to interact with customers through the telephone, e-mail, letter, or in person. Each quarter the district offices, Highway Safety, Motor Carriers and Human Resources submit the number of customers who contacted their respective offices. Highway Safety and Human Resources numbers are based only from their toll-free number.

**Improvement Status:**

Contacts are down nearly 30,000 this quarter, due to a decrease in customer phone calls to Motor Carriers. More than 80 percent of these customers are now using Motor Carriers' new web-based system to transact business, meaning that fewer calls are needed.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Percent of documented customer requests responded to within 24 hours*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

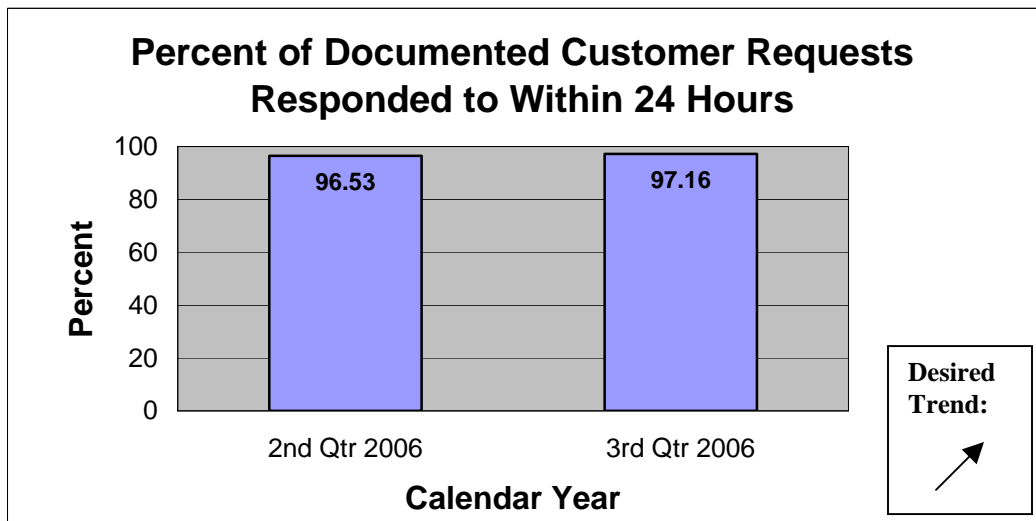
This measure tracks how quickly MoDOT responds to customer requests through the customer service centers.

**Measurement and Data Collection:**

This information comes from the customer service database, where customer requests requiring follow-up are documented from the time the call comes in until the time the request is completed. This may include requests for signs, traffic signal review, pothole patching or work zone congestion. More than 90 percent of our total customer requests are responded to right away, including basic phone call transfers, questions, or requests for general information. These routine contacts are not documented here.

**Improvement Status:**

Numbers continue to be extremely high in this area since the customer service database was revamped in April 2006 to more precisely capture response times. Continued training and emphasis on quick response will improve this number further.





## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Average completion time on requests requiring follow up*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

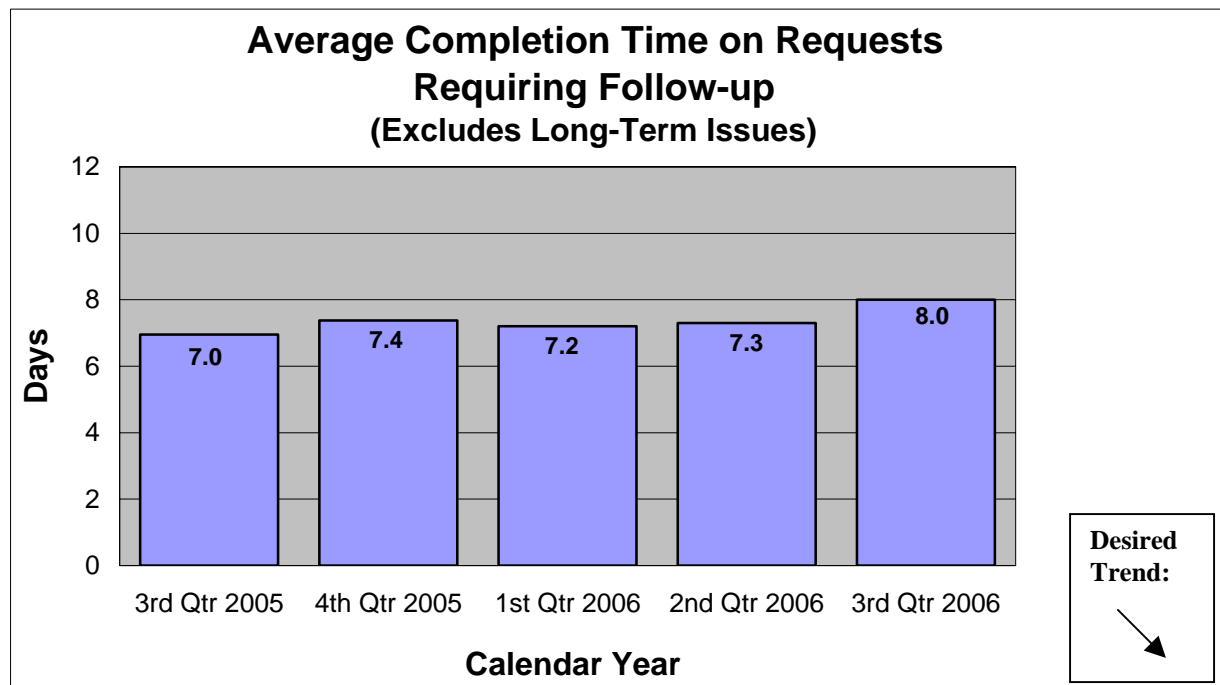
This measure tracks MoDOT's responsiveness to customer inquiries that are received through the customer service centers and documented in the database.

**Measurement and Data Collection:**

Customer requests in the customer service database requiring a completion time of more than 24 hours are tracked for average completion time. Longer-term requests that require more than 30 days to complete are removed from the results, because a few of these longer-term requests would skew the overall results. Time is measured in working days; weekends and holidays are excluded.

**Improvement Status:**

Response times are trending in the wrong direction. Districts with slower completion times have been reminded to address customer requests as quickly as practical and report completion to customer service centers to enter in the database. However, higher-priority tasks in the field must sometimes take precedence over routine customer concerns.



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# Partner with Others to Deliver Transportation Services

*Tangible Result Driver – Kevin Keith,  
Chief Engineer*

To be an effective leader in transportation, MoDOT must work with agencies and branches of government, including state, county, private industry and municipalities to deliver a quality transportation system that meets the needs of everyone. A coordinated transportation system requires partnerships to ensure compatible decisions are made. Partnering builds trust and ensures quality results.



## Partner With Others to Deliver Transportation Services

### *Number of dollars of discretionary funds allocated to Missouri*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Finance Manager

**Purpose of the Measure:**

This measure shows the number of dollars of discretionary funds allocated to Missouri.

**Measurement and Data Collection:**

The federal government allocates discretionary funds to states for specific highway and multimodal projects. Multimodal projects include waterway, aviation and transit activities. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration, Federal Transit Administration and Federal Aviation Administration. Missouri's share of the total highway funds allocated nationwide over the last five years is 3.1 percent, which ranks 11<sup>th</sup>. The state of California received the largest share with 5.9 percent. Missouri's share of the total multimodal funds allocated nationwide over the last five years is 2.0 percent, which ranks 15<sup>th</sup>. The state of California received the largest share with 11.6 percent.

**Improvement Status:**

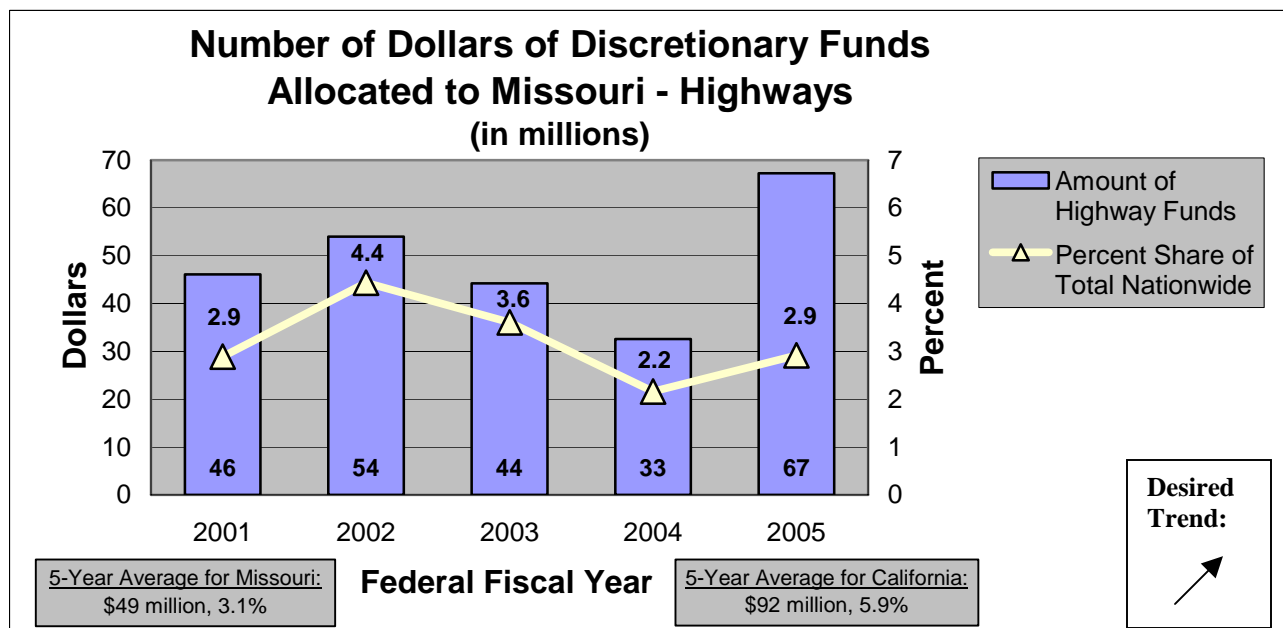
Highways:

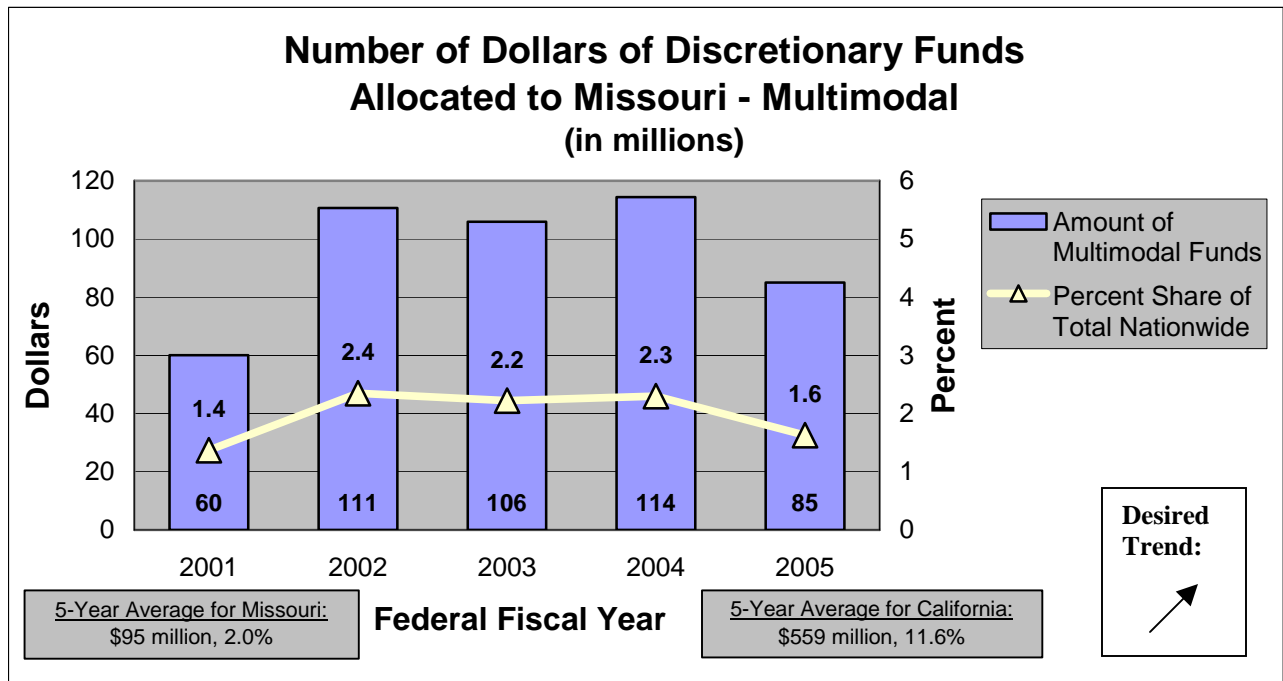
The number of dollars of discretionary funds allocated to Missouri for highway projects increased in 2005 due to the passage of the multi-year federal highway act, SAFETEA-LU. The funds allocated nationwide increased 53 percent from 2004 to 2005. The funds allocated to Missouri increased 106 percent from 2004 to 2005. Missouri's Congressional delegates were successful in securing discretionary funds in SAFETEA-LU for highway projects in Missouri.

Multimodal:

The number of dollars of discretionary funds allocated to Missouri for multimodal projects declined in 2005 due to a reduction in the share of aviation funds.

Governmental Relations along with senior management continue to work closely with Missouri's Congressional delegates to identify specific transportation projects that are good candidates for discretionary funds.





## Partner With Others to Deliver Transportation Services

### *Percent of earmarked dollars that represent MoDOT's high priority highway projects*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Finance Manager

**Purpose of the Measure:**

This measure shows the percent of earmarked dollars that represent MoDOT's high priority highway projects.

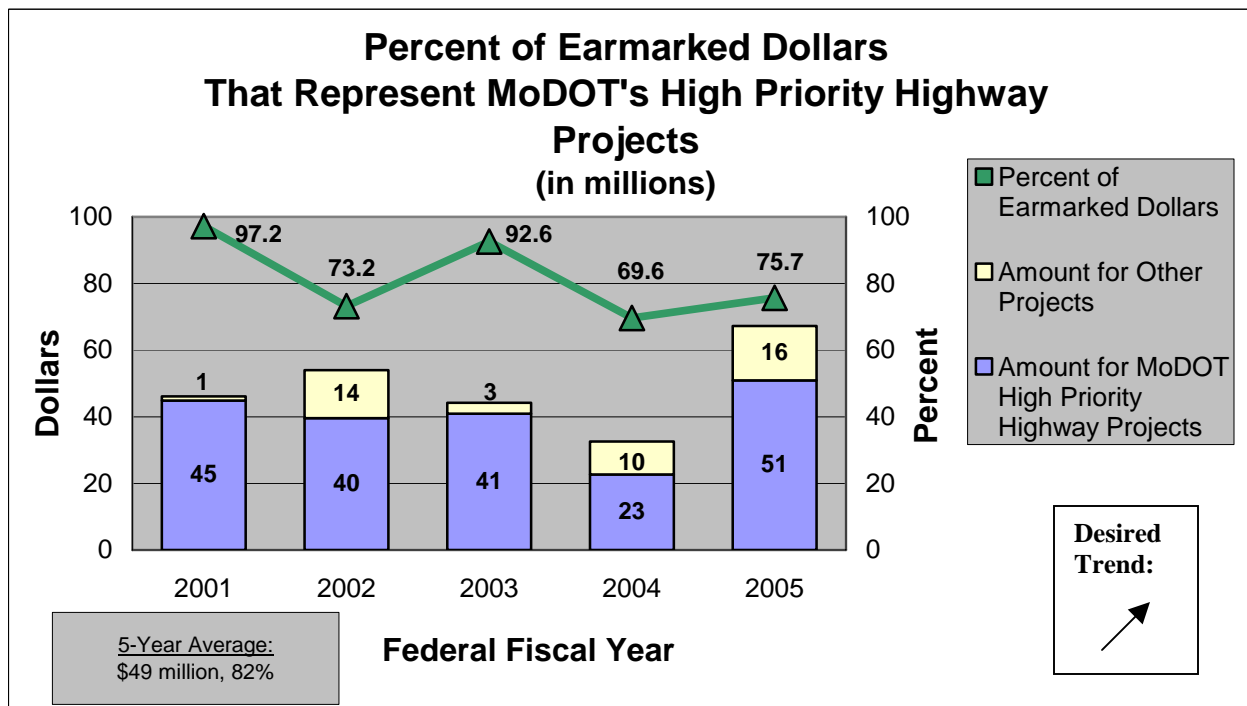
**Measurement and Data Collection:**

Earmarked dollars are federal funds allocated to states for specific highway projects. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration. MoDOT's high priority highway projects are identified in the Federal Priorities list that is prepared by Governmental Relations. This list is provided to Missouri's Congressional delegates.

**Improvement Status:**

Missouri's earmarked dollars for specific highway projects increased in 2005 due to the passage of the multi-year federal highway act, SAFETEA-LU. Missouri's Congressional delegates were successful in securing earmarked dollars in SAFETEA-LU for highway projects in Missouri. Also increasing was the percent of earmarked dollars that represent MoDOT's high priority highway projects. Over the last five years, 82 percent of the earmarked dollars were allocated for MoDOT's high priority highway projects.

Governmental Relations along with senior management continue to work very closely with Missouri's Congressional delegates to identify MoDOT's high priority highway projects that are good candidates for earmarked dollars.



## Partner With Others to Deliver Transportation Services

### *Number of dollars generated through cost-sharing and other partnering agreements*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Mark Mehmert, Partnership Development Manager

**Purpose of the Measure:**

This measure monitors the effectiveness of MoDOT's cost sharing and partnering programs. It shows the funds invested in highway construction by cities, counties, transportation corporations, and transportation development districts as a result of funds being made available for local construction by MoDOT.

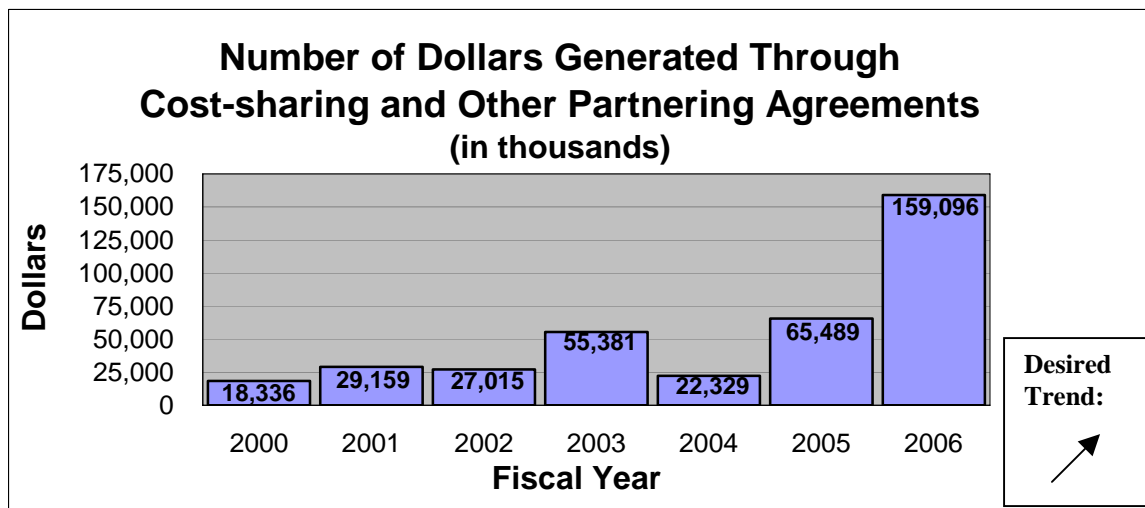
**Measurement and Data Collection:**

The data comes from various sources, both inside and outside of MoDOT. The sources include transportation corporations, transportation development districts, MoDOT districts and programs with responsibility for monitoring partnering agreements and permits.

Agreements included in the last two years of this data set were compiled in the fiscal year in which the agreement was entered into or during which the permit was issued. In the data up to 2004, the dollars generated were compiled at the point projects were added to the STIP, and accounts for the large variance in 2004.

**Improvement Status:**

In 2006, two tremendous partnering agreements (Highways 67 and 36) were reached that accounted for \$103 million of the total shown, and the U.S. Army Corps of Engineers was a vital partner in the Highway 67 project. Significant agreements with the cities of Lebanon, Riverside, Branson, and Desloge were signed, and Madison County also partnered with MoDOT in a noteworthy agreement. FY 07 is off to an auspicious beginning with another large agreement expected to be signed in this quarter.



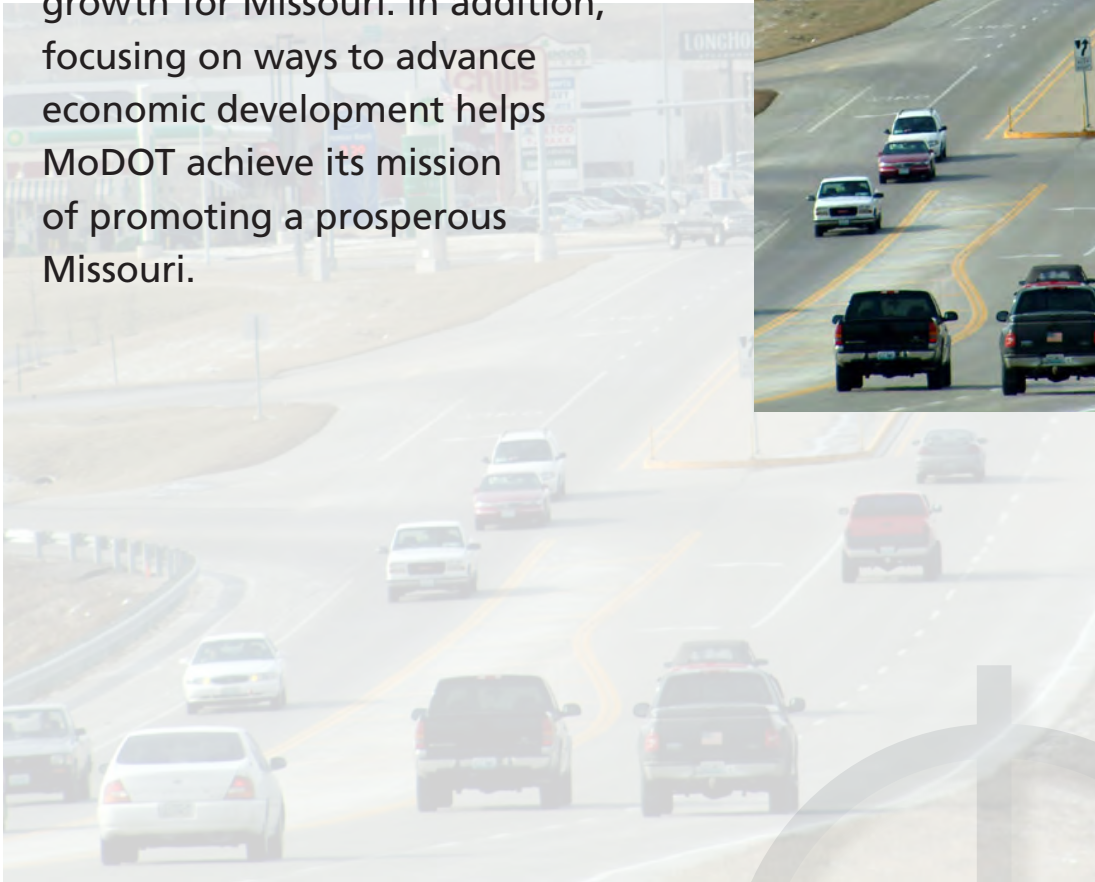
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# Leverage Transportation to Advance Economic Development

*Tangible Result Driver – Roberta Broeker,  
Chief Financial Officer*

Transportation is essential to Missouri's economic well-being. It plays a critical role in creating jobs and stimulating lasting growth for Missouri. In addition, focusing on ways to advance economic development helps MoDOT achieve its mission of promoting a prosperous Missouri.



## Leverage Transportation to Advance Economic Development

### *Number of miles of new four-lane corridors completed*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the miles of additional divided highways available to the public. Access to a divided highway system supports economic development in Missouri. One of MoDOT's recent priorities has been completion of four-lane corridors in order to connect segments of highway where gaps exist.

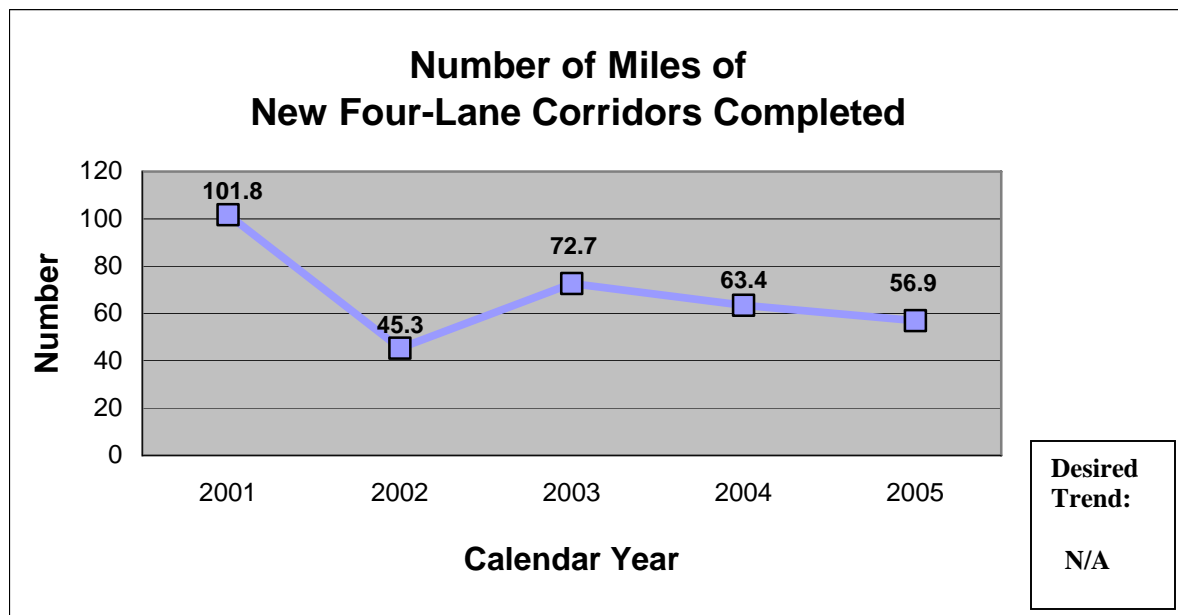
**Measurement and Data Collection:**

Projects that create or complete sections of dual-divided highways will be identified and tracked. Completion will be defined as the date the project is opened to traffic.

**Improvement Status:**

The increase of nearly 102 miles in 2001 is primarily due to bond-financed projects approved in 2000 by the Missouri Legislature. Approximately 57 miles were completed during calendar year 2005, primarily on U.S. Route 63, U.S. Route 71 and U.S. Route 60. Because of the department's emphasis on Smooth Roads Initiative projects, progress in 2006 is expected to be somewhat lower. However, the number of miles of new four-lane corridors constructed will increase in 2007 and beyond due to Amendment 3 bond funds approved by Missouri voters in November 2004.

As part of a partnership with the Missouri Department of Economic Development, MoDOT is initiating a study to track the creation and location of businesses along newly established four-lane corridors. This information, along with data on business size and employment, will help determine the economic value of four-lane corridors.



## Leverage Transportation To Advance Economic Development

### *Percent utilization of SIB & STAR loan programs*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Mark Mehmert, Partnership Development Manager

**Purpose of Measure:**

This measure shows the percent utilization of MoDOT's revolving loan programs, the Missouri State Infrastructure Bank (SIB) and the State Transportation Assistance Revolving (STAR) program. It demonstrates how well-utilized these funds are by showing a ratio of how much of the funds are currently on loan versus the amount available to be loaned.

The Missouri Transportation Finance Corporation (MTFC), a not for profit corporation, is Missouri's SIB. The SIB program was created by federal law in 1995 to finance both highway and non-highway projects. The STAR program finances non-highway projects such as air, water, rail, or mass transit facility construction, mass transit vehicles, and vehicles for elderly or handicapped persons. STAR funding is determined by the General Assembly.

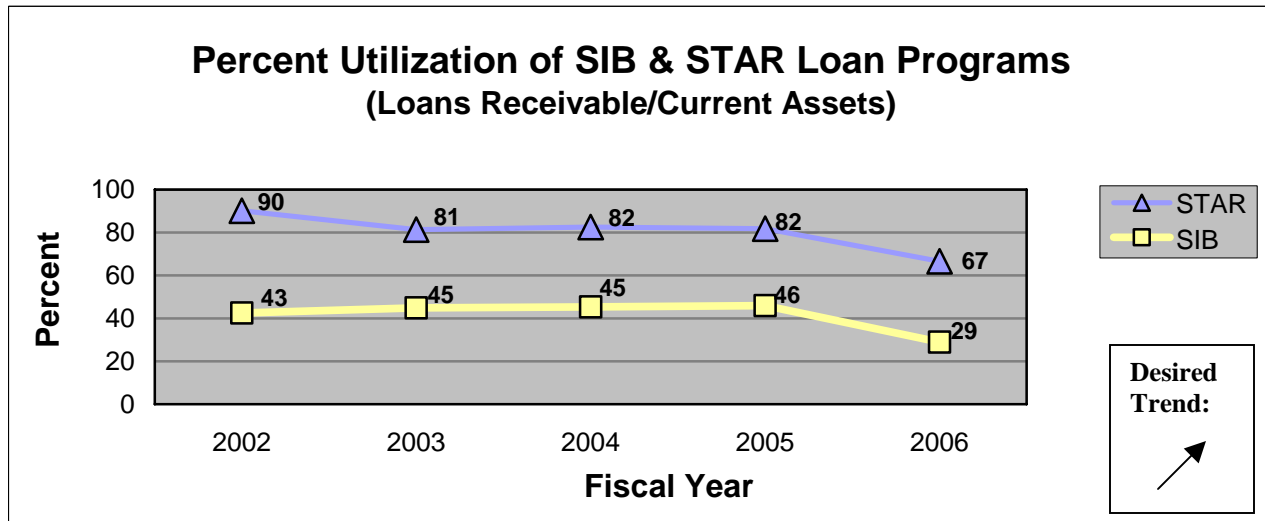
**Measurement and Data Collection:**

The data used to calculate the amounts of funds currently on loan is collected through a database used to track the SIB and STAR loans. Amounts available to be loaned are obtained from financial reports.

**Improvement Status:**

A SIB loan for \$60,000 was disbursed during the 2006 fiscal year. Large loans were repaid to the SIB this year, but only a small loan was disbursed. This resulted in a lower percentage of SIB funds being utilized. The SIB currently has two formal loan applications pending, three loans approved but not executed and six loans are in the discussion stage. On Sept. 30, 2006, the SIB funds available for loan were approximately \$55 million.

To advance this measure and improve SIB utilization, the MTFC Board ratified a marketing plan drafted by partnership development staff. Part of the plan adopted by the board featured marketing workshops for district staff and exhibiting at appropriate conferences. The marketing workshops have been scheduled in almost all the districts. So far in FY 2007, partnership staff have exhibited or presented at six events.



## Leverage Transportation to Advance Economic Development

### *Rate of economic return from transportation investment*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Mark Mehmert, Partnership Development Manager

**Purpose of the Measure:**

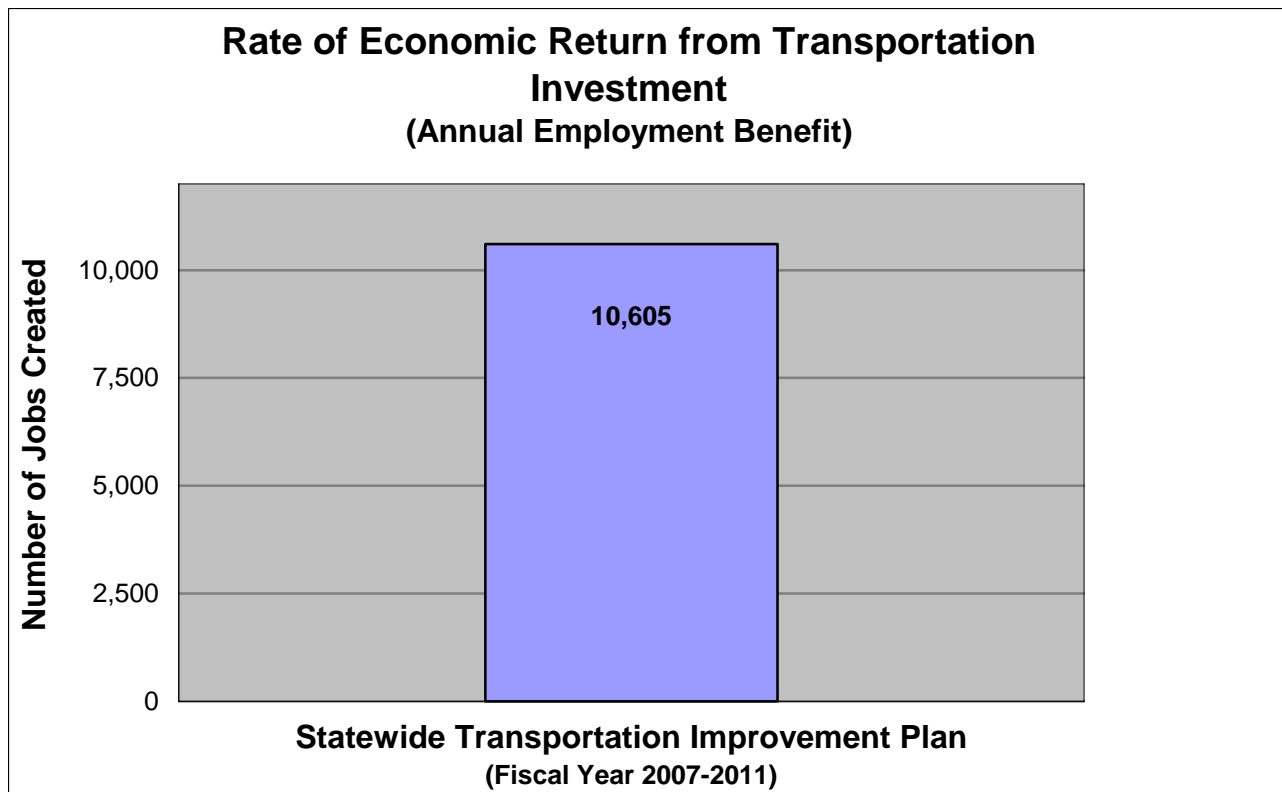
This measure monitors the economic return from the state's roadway transportation investment through the number of jobs created, changes in personal income, and value-added GSP (Gross State Product).

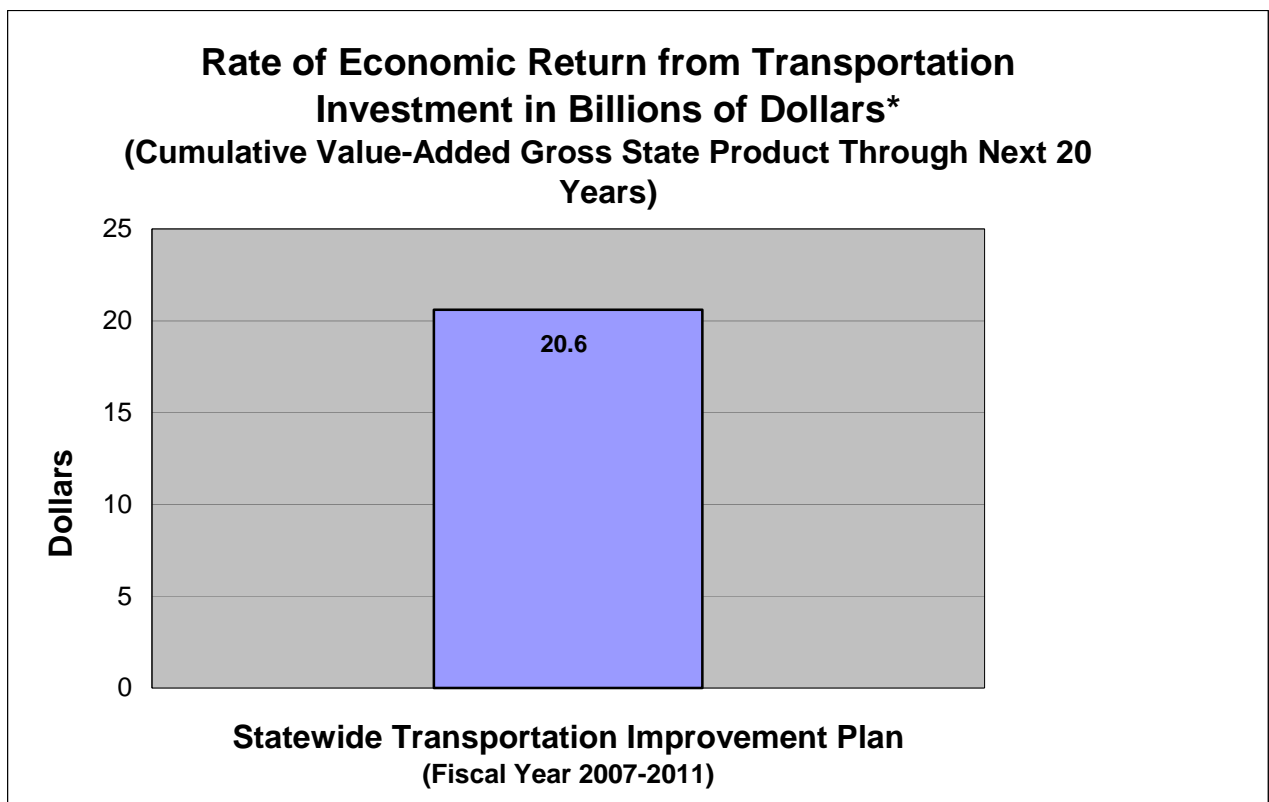
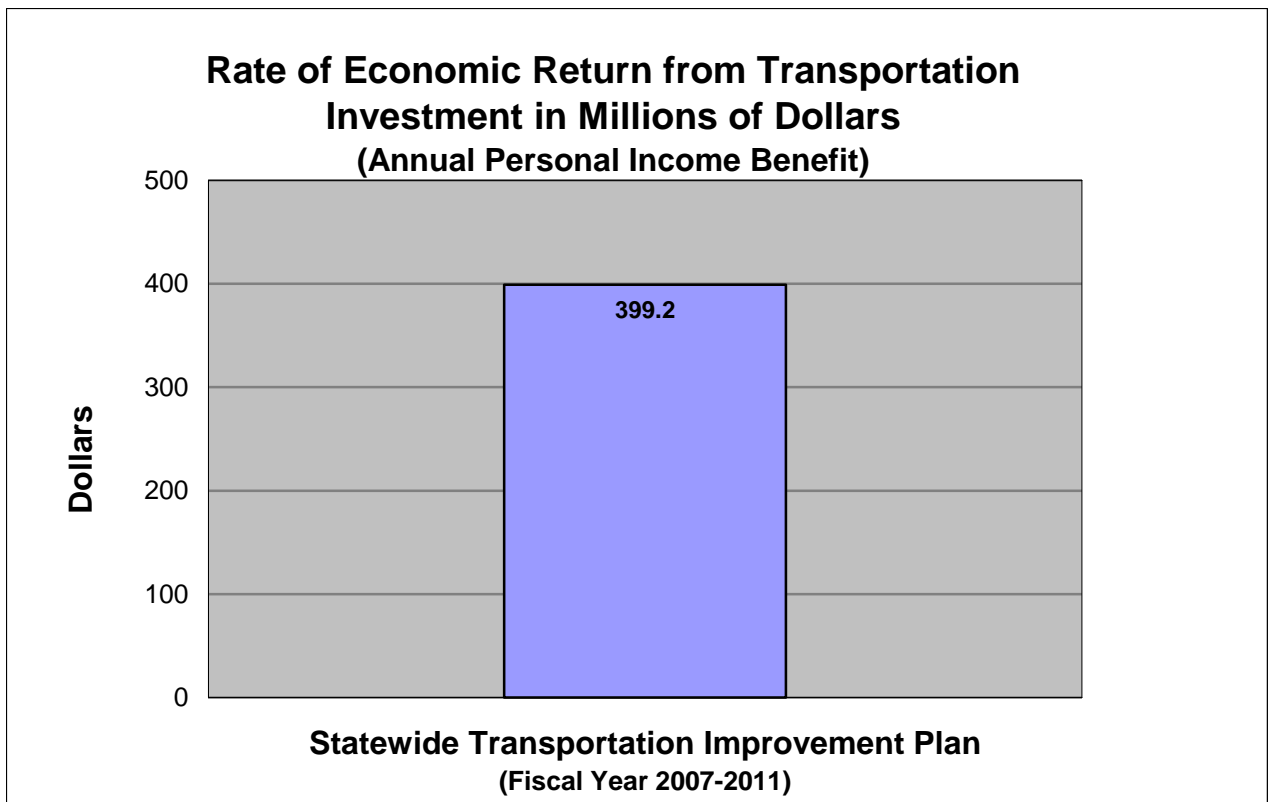
**Measurement and Data Collection:**

MoDOT partners with the Department of Economic Development to complete economic modeling of the state's transportation investments. The REMI economic model is used for this analysis. Through these efforts, the department is able to provide state and regional level estimates to demonstrate employment, income and state benefits related to specific projects, corridors and program expenditures.

**Improvement Status:**

The information generated through the use of the REMI model demonstrates that there is a strong link between transportation investments and economic development. A year-by-year analysis of the Statewide Transportation Improvement Program is used to provide a summary of economic benefits related to transportation investments on a program basis. As a summary measure of transportation's contributions, the 2007 through 2011 Statewide Transportation Improvement Plan (STIP) will invest over \$5.7 billion in 900 transportation projects across the state. In the average year, the STIP investments create approximately 10,605 new jobs paying an average wage of \$28,207 per job. There is an expected increase in annual average personal income of over \$399 million and an expected increase in economic activity of \$1 billion. In terms of Gross State Product – value added, the 2007 through 2011 STIP jobs contribute over \$594.7 million per year and \$20.5 billion over the next 20 years. MoDOT will continue to work to understand and maximize the benefits to the state and its citizens from transportation investments.





\* Added Gross State-Product equates to a 3.61:1 return on the transportation investment. Thus for every \$1 invested through the STIP, the state can expect a return of approximately \$3.61.

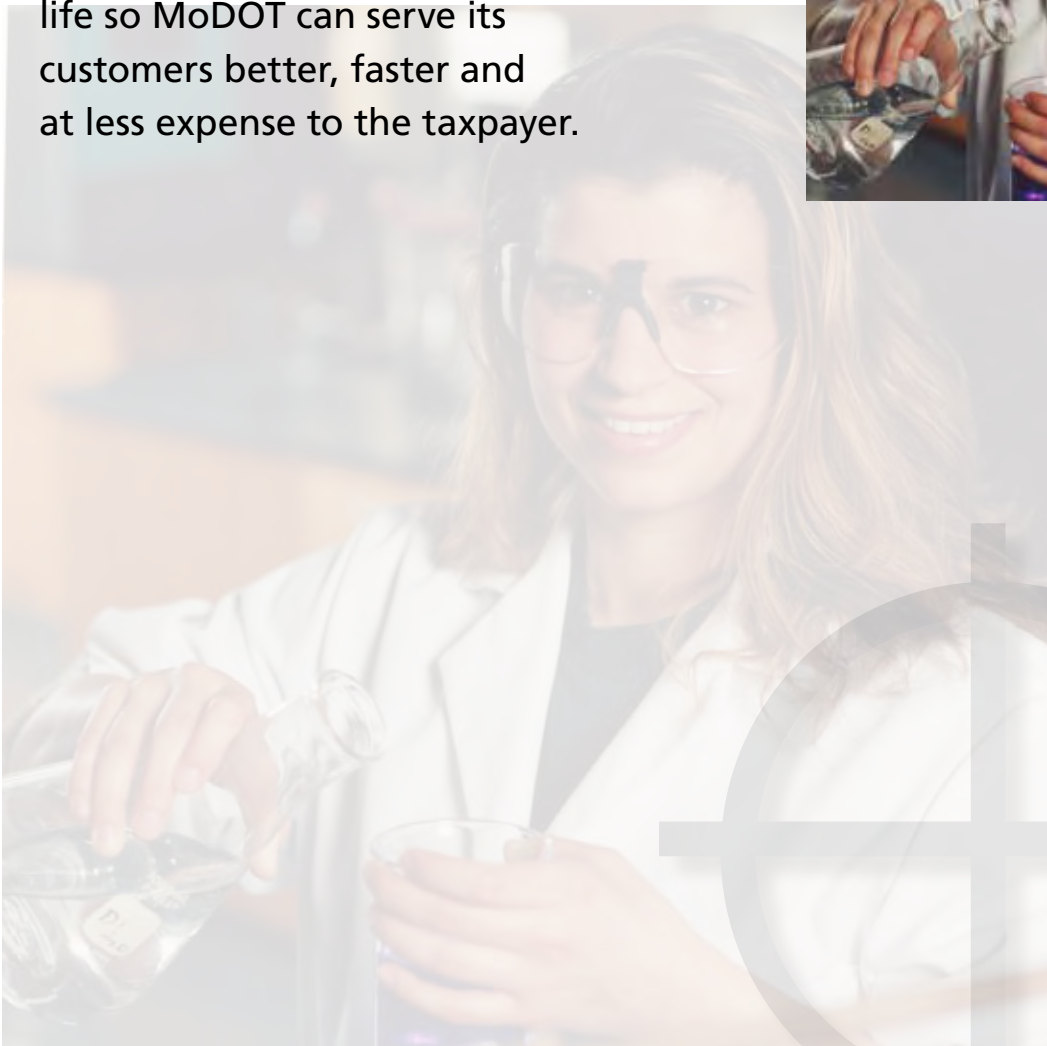
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# Innovative Transportation Solutions

*Tangible Result Driver – Mara Campbell,  
Organizational Results Director*

MoDOT values innovation. The department empowers employees and seeks input from stakeholders to generate innovative ideas. Collaboration with staff, academia and industry make unique concepts come to life so MoDOT can serve its customers better, faster and at less expense to the taxpayer.





## Innovative Transportation Solutions

### *Percent of innovative transportation solutions implemented*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Ernie Perry, Organizational Performance Administrator

**Purpose of the Measure:**

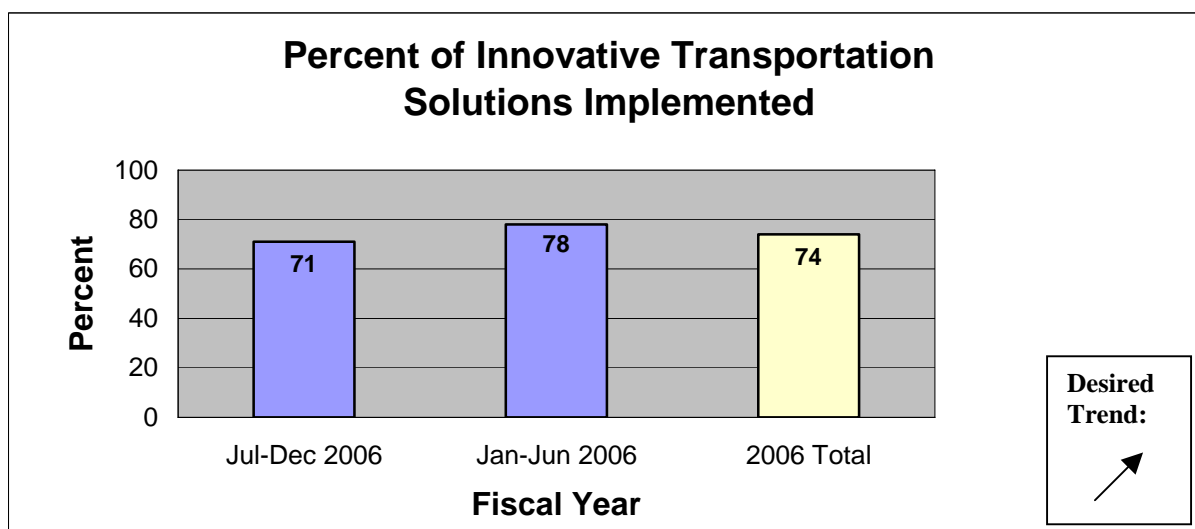
This measure tracks the percentage of new and innovative ideas, methods, or tools MoDOT implements as a result of its research and innovation efforts. MoDOT realizes the importance of supporting innovation and research and is driven to provide the department with the latest ideas, technologies, and solutions needed to deliver the most efficient, safe, and economical transportation system.

**Measurement and Data Collection:**

Innovative transportation solutions include any new ideas, methods, policies, processes, standards, equipment or tools introduced for the purpose of improving the department's operation, services, or products. Such solutions are likely introduced as a result of a research project, study, or initiative managed through MoDOT's research program. "Solutions implemented" refers to MoDOT's application of a new idea, method, policy, process, standard, equipment or tool for the purpose of improvement. The definition of implemented, for purposes of this measure, includes all solutions that have been or are being applied. "Percent of solutions implemented" is determined by dividing the number of research projects producing implementable results by the total number of research projects completed during the prior six-month period. While many ideas and technologies are pursued through research and related efforts, not all produce solutions which can be implemented by MoDOT. However, MoDOT's elevated emphasis on strategically focused research and its implementation should result in better and more economical transportation products and services delivered. Data for this measure will be collected and analyzed every six months.

**Improvement Status:**

During Fiscal Year 2006, MoDOT's research program completed 23 projects, 17 of which produced implemented results, making a total of 74 percent innovative transportation solutions implemented. MoDOT's Organizational Results continues to aggressively pursue research and innovations focused on addressing pertinent department needs that are closely tied to the 18 Tangible Results. This focus will lead to more usable solutions and better value in the end. While not all research produces results or solutions that can be implemented, MoDOT recognizes the importance and value of conducting a research program driven to make a difference and working to ensure implementation. This measure will be updated for the January 2007 Tracker.





## Innovative Transportation Solutions

### *Number of external awards received*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Ernie Perry, Organizational Performance Administrator

**Purpose of the Measure:**

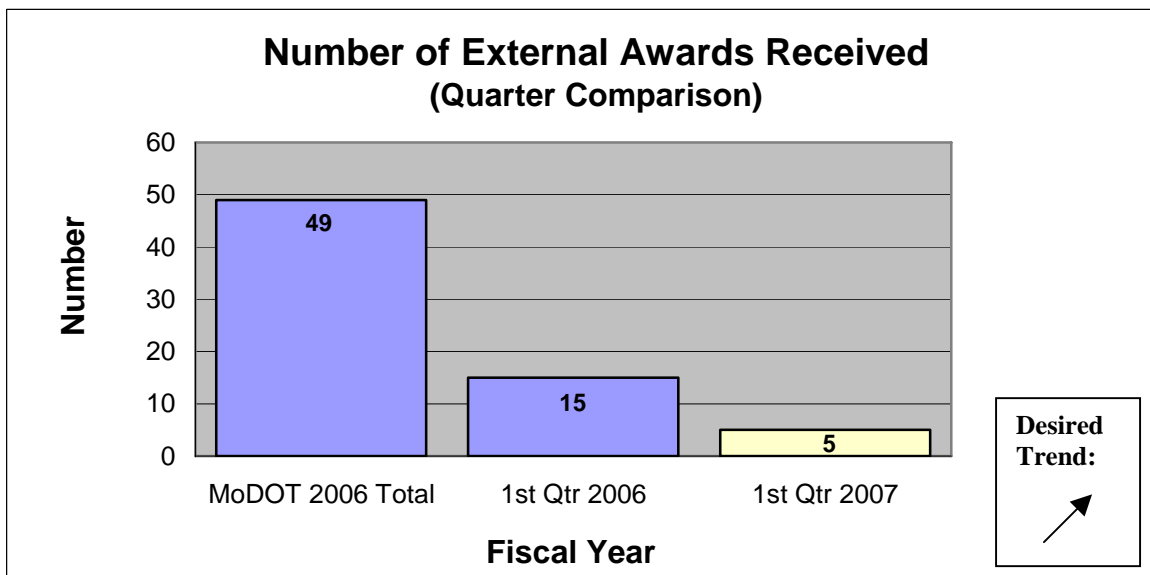
This measure tracks the number of external awards received by the department. These awards display the department's dedication and efforts towards efficiency, innovation and quality throughout the organization.

**Measurement and Data Collection:**

Each district and division office tracks the awards presented to the department by external organizations, to include all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. This data enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities. Data collection began for this measure on Jan. 1, 2005.

**Improvement Status:**

MoDOT received five awards in the first quarter of fiscal year 2007 which was 10 less than the number received in the same quarter last year. Three of the awards won were received at the National Transportation Public Affairs Workshop. The following are the award recipients: Issues/Crisis Management -- Kansas City Paseo Bridge; Audio Public Service Announcement Without Consultant - Buckle-Up for Prom; Interactive Presentations - MAP Funding Allocation Challenge. In addition, the Governor's Award for Quality and Productivity in Process Improvement and the AASHTO Public Affairs Skills Award were received. MoDOT districts and divisions continue to enter various competitions to compare MoDOT's work against the efforts of other organizations and increase the results.



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# Fast Projects That Are of Great Value

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.



## Fast Projects That Are of Great Value

### *Percent of estimated project cost as compared to final project cost*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Renate Wilkinson, Planning and Programming Engineer

**Purpose of the Measure:**

This measure determines how close MoDOT's total program completion costs are to the estimated costs.

**Measurement and Data Collection:**

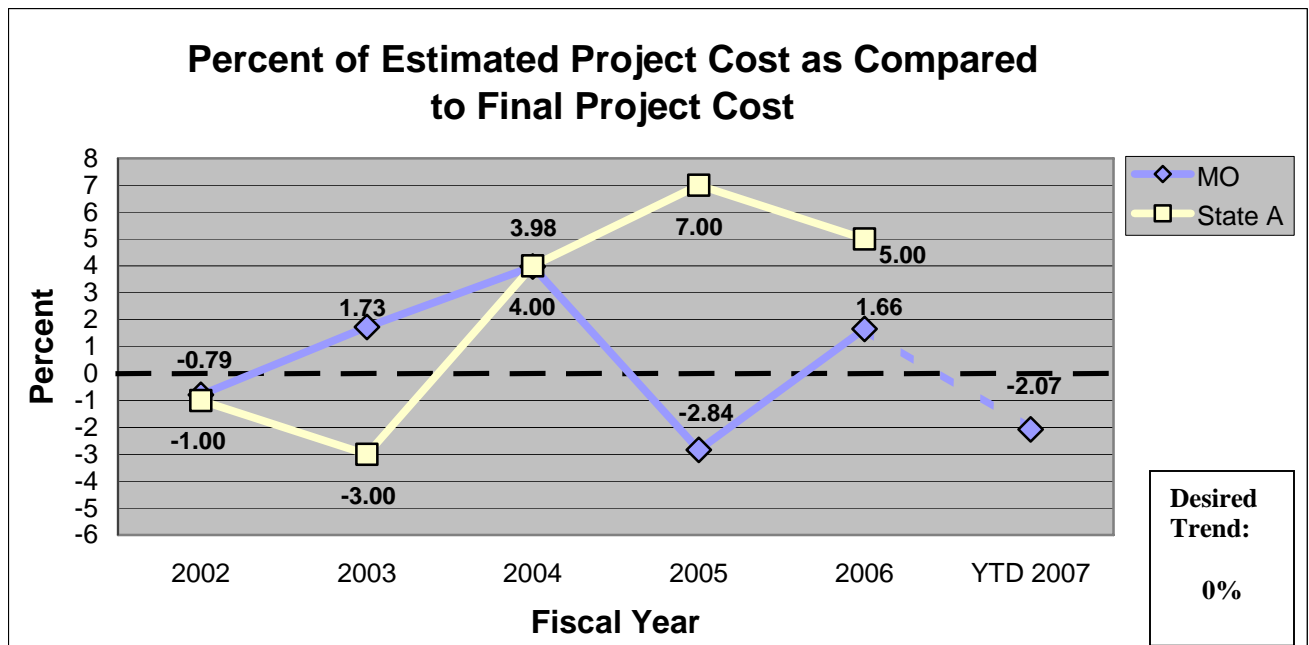
MoDOT determines the completed project costs and compares them to the estimated costs. The completed project costs are reported during the state fiscal year in which the project is completed.

Project costs include design, right of way purchases, utilities, construction, inspection and other miscellaneous costs. The estimated cost is based on the amount included in the most recently approved Statewide Transportation Improvement Program. Completed costs include actual expenditures. The costs do not include those that might result from any legal claims, which are rare occurrences, regarding the projects after they are completed. Positive numbers indicate the final (completed) cost was higher than the estimated cost.

**Improvement Status:**

The increased cost trend through state fiscal year 2004 reflects the increased number of projects in state fiscal years 2001, 2002 and 2003. The increased work volume resulted in higher awards and overall costs. The decrease in 2005 can be attributed to the lower work volume and increased competition among contractors. The increase in 2006 can be primarily attributed to inflationary pressures. The ideal status is no deviation in the estimated vs. final project cost, or 0 percent.

Very few states provide data for this measure, and most prefer to keep it confidential. The graph below shows how MoDOT performance compares with another state in this region. In 2002 and 2004, the performance of both states was nearly the same. In other years, it varied substantially.



Positive numbers indicate the final (completed) cost was higher than the estimated cost.

## Fast Projects That Are of Great Value

### *Average number of years it takes to go from the programmed commitment in the Statewide Transportation Improvement Program to construction completion*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Machelles Watkins, Transportation Planning Director

**Purpose of the Measure:**

This measure monitors how quickly projects go from the programmed commitment to construction completion.

**Measurement and Data Collection:**

MoDOT compares how long it takes from when the project is added to the Statewide Transportation Improvement Program to when the project is completed. Data is categorized by the type of work, and distinguishes between design and construction stages.

**Improvement Status:**

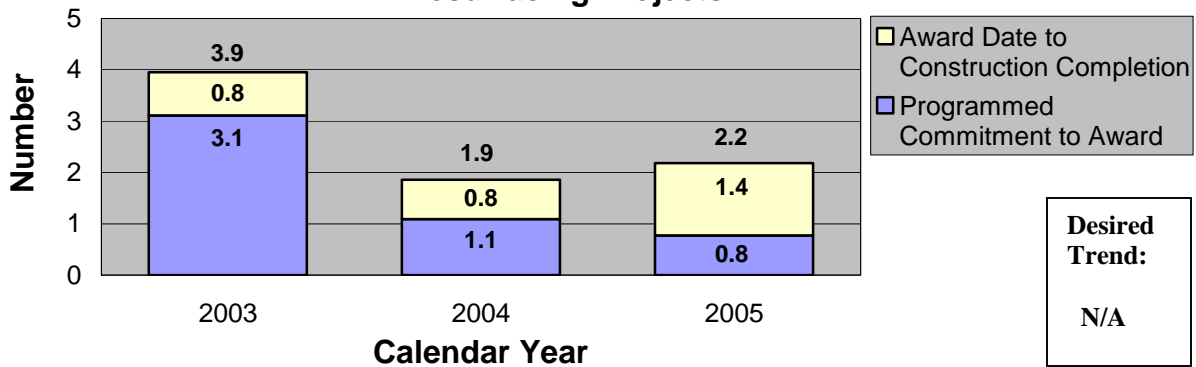
In general, resurfacing and safety projects take the least amount of time to develop and complete, around two years. New or improved bridge projects take more time, around four years. New or expanded highways take yet more time, from five to eight years. Major bridge projects take the most time, from seven to 11 years to develop and complete.

The apparent increase in construction time from 2004 to 2005 is due to different data used to denote project completion. The 2004 data represents completion of the contractor's construction activities. The 2005 data represents project finalization, which includes final payment and contract completion. The change in data was made because there is more data available for project finalization, making the measurement more representative.

Efforts are being made to minimize the amount of time between construction completion and project finalization. We anticipate that project completion times will be shorter in the future.

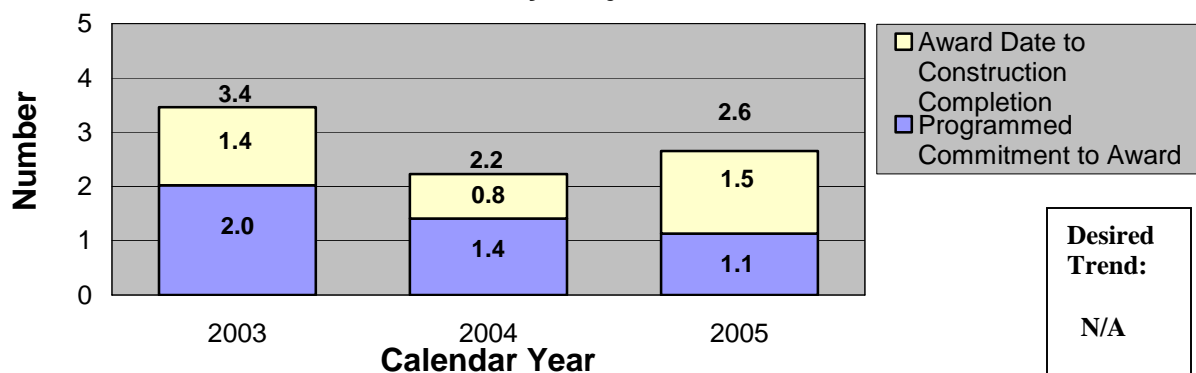
### Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion

#### Resurfacing Projects



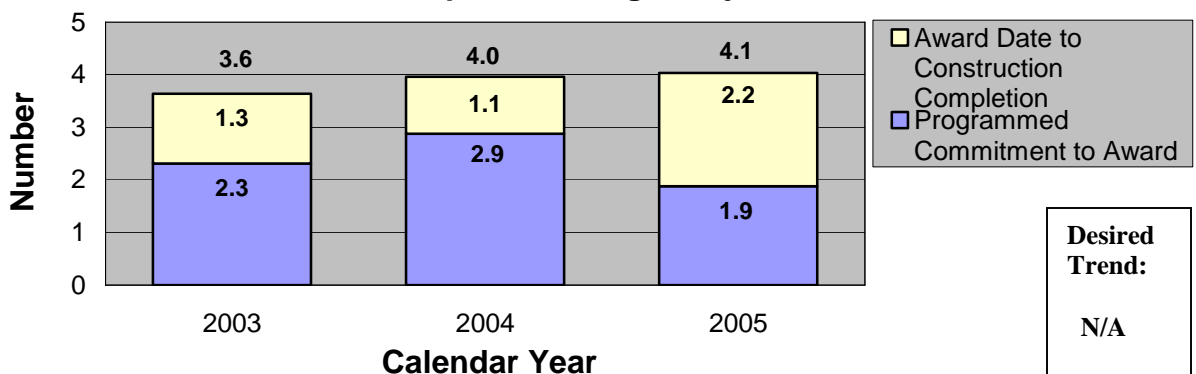
### Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion

#### Safety Projects



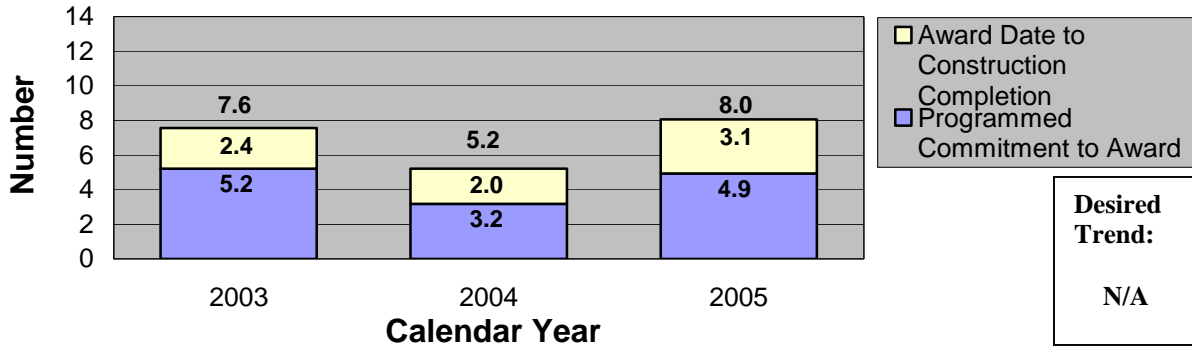
### Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion

#### New/Improved Bridge Projects



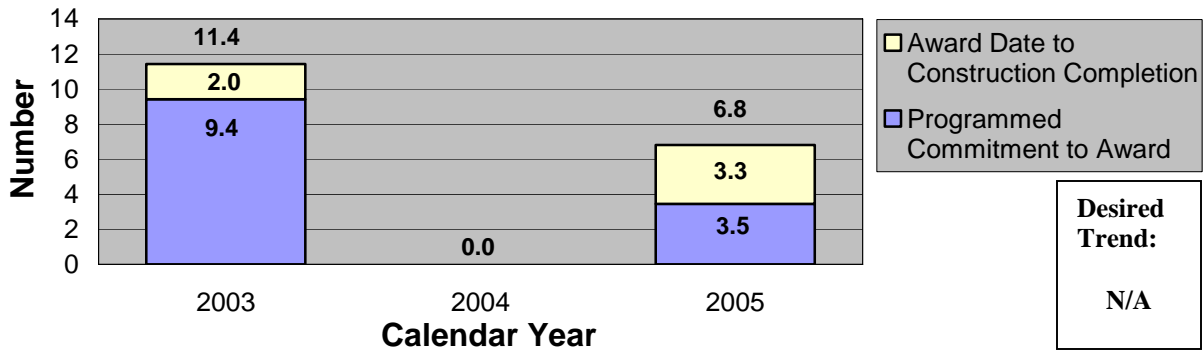
# **Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion**

## **New/Expanded Highway Projects**



# **Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion**

## **Major Bridge Projects**



## Fast Projects That Are Of Great Value

### *Percent of projects completed within programmed amount*

**Results Driver:** Dave Nichols, Director of Project Delivery

**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of the Measure:**

The measure tracks the percentage of projects completed within the programmed amount. The cost includes such items as engineering, right-of-way and contract payments.

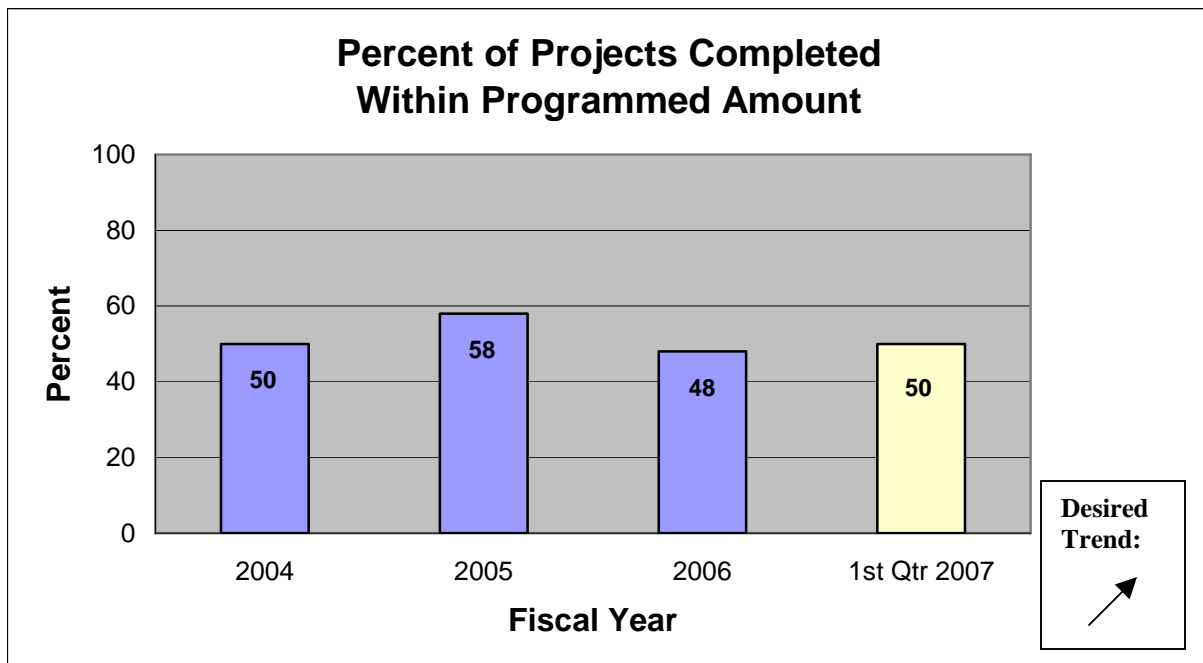
**Measurement and Data Collection:**

The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

Project costs include design, right-of-way purchases, utilities, construction payments, inspection and other miscellaneous costs.

**Improvement Status:**

MoDOT would like to see all projects completed within the programmed amount. The goal is to deliver projects at the programmed amount allowing the greatest number of projects to be built with the funding available. MoDOT's data indicates that there is a great deal of deviation among individual projects with half over and half under budget. Emphasis has been placed on scoping projects and developing estimates that represent the true cost of delivering the projects. MoDOT is striving to deliver quality projects cheaper by using practical design.





## Fast Projects That Are Of Great Value

### *Percent of projects completed on time*

**Results Driver:** Dave Nichols, Director of Project Delivery

**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of the Measure:**

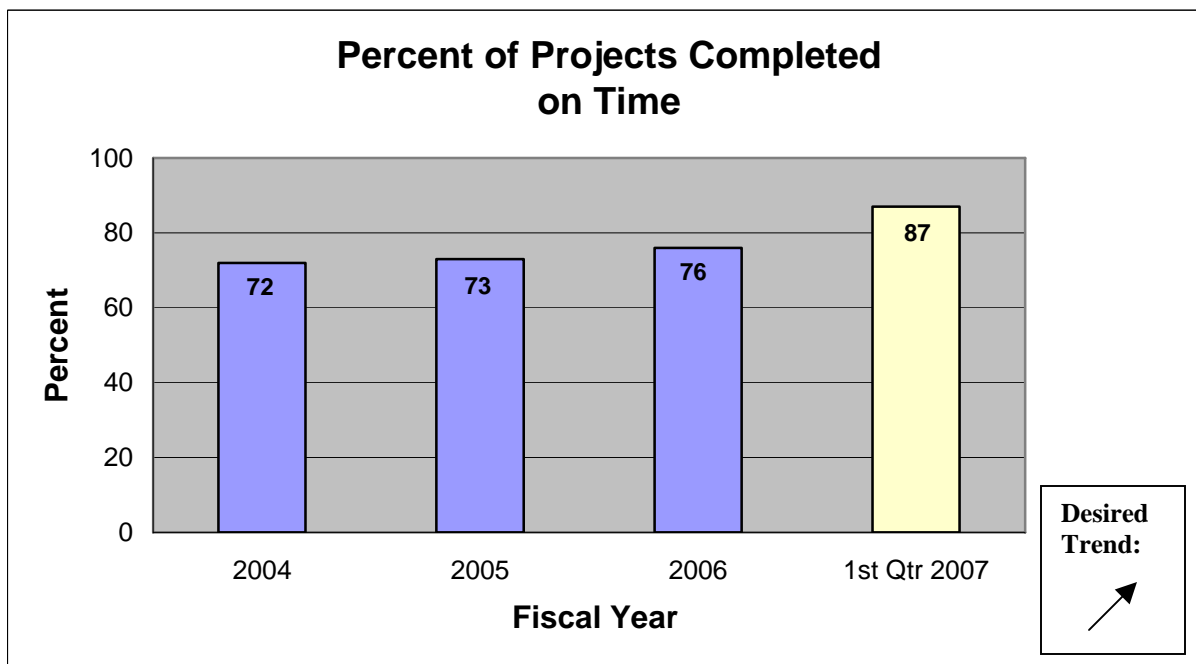
This measure tracks the percentage of projects completed by the commitment date established in the contract. Adjustments to the completion date are made when additional work is required or for unusual weather occurrences. It indicates MoDOT's ability to complete projects by the agreed upon date.

**Measurement and Data Collection:**

The project manager will establish project completion dates for each project. They are documented in MoDOT's SiteManager and STIP databases. It will be part of the Plans, Specifications & Estimates submittal. The actual completion date will be documented by the Resident Engineer and placed in MoDOT's Management System.

**Improvement Status:**

The results indicate a significant increase from previous years in the percent of projects completed on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. An emphasis has been placed on reviewing construction schedules and assessing liquidated damages, which should lead to improvements in timely completion.



## Fast Projects That Are Of Great Value

### *Percent of change for finalized contracts*

**Results Driver:** Dave Nichols, Director of Project Delivery

**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of the Measure:**

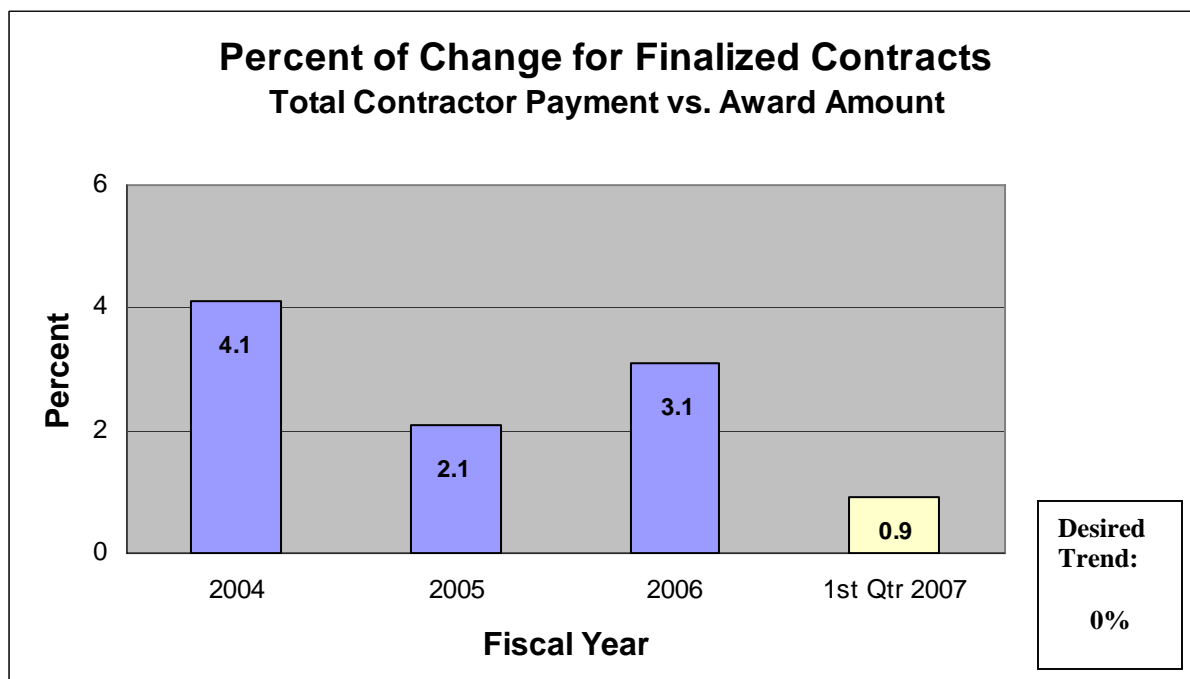
The measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor.

**Measurement and Data Collection:**

Contractor payments are generated through MoDOT's SiteManager database and processed in the financial management system for payment. Change orders document the underrun/overrun of the original contract.

**Improvements Status:**

MoDOT's performance for the first quarter of 2007 is well below the target of two percent. The overall improvement is a result of a strong emphasis placed on constructing projects within budget, the use of practical design and value engineering. By limiting overruns on contracts, MoDOT can deliver more projects, leading to an overall improvement of the entire highway system. Recently, the Performance Plus employee incentive program is placing additional emphasis on completion of projects within budget.



## Fast Projects That Are Of Great Value

### *Average construction cost per day by contract type*

**Results Driver:** Dave Nichols, Director of Project Development

**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of the Measure:**

This measure tracks the cost per day for project completion to determine the impact to the traveling public, enabling MoDOT to better manage project completion needs.

**Measurement and Data Collection:**

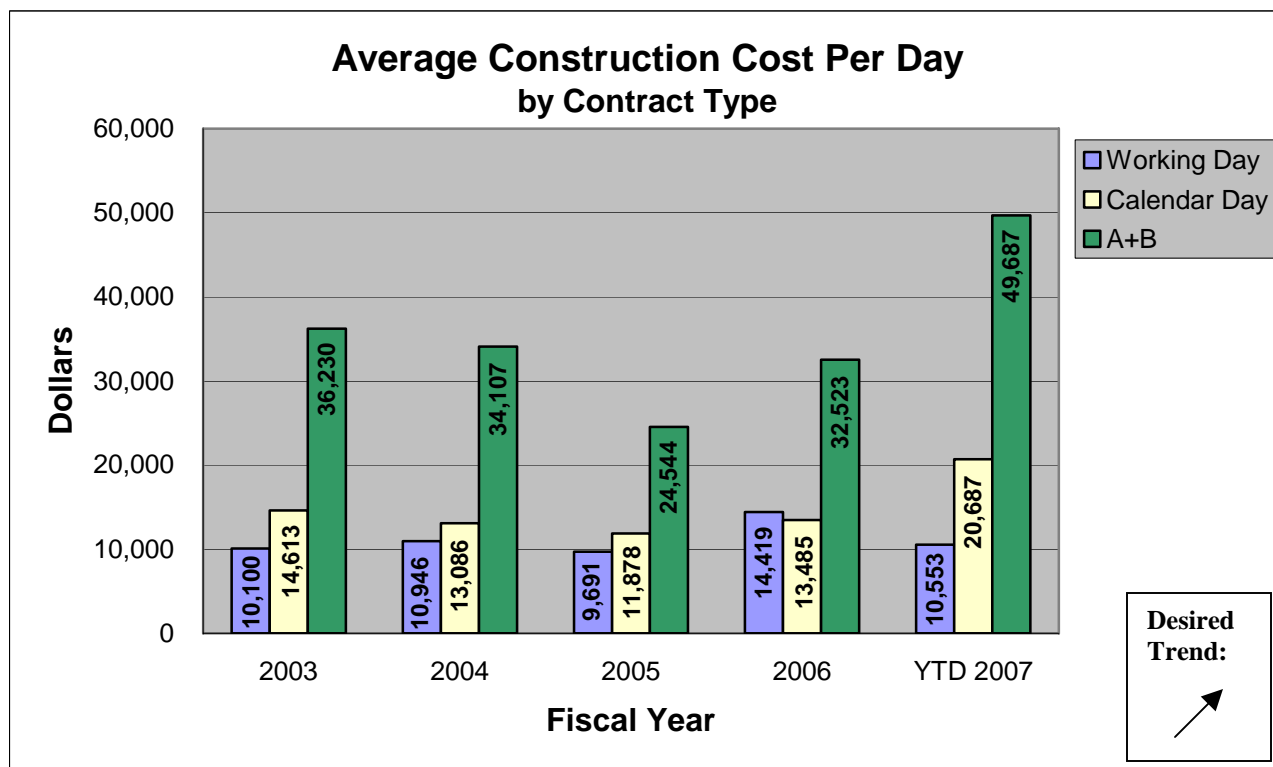
This information is gathered by extracting the actual time used for construction from the summary of working days in the SiteManager database and dividing it by the total costs of the project.

The measurement groups construction contracts into three categories:

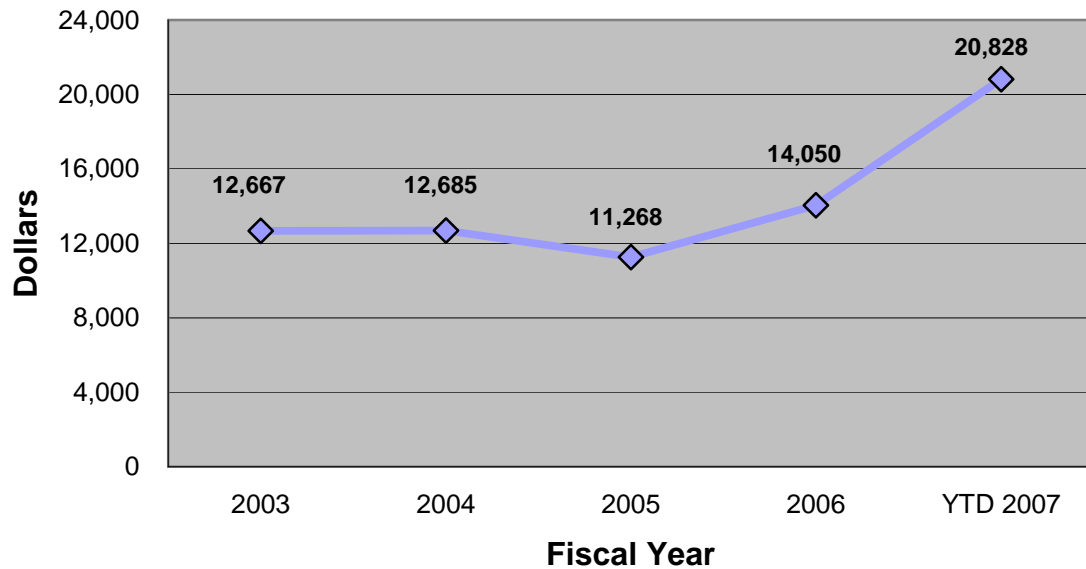
- **WD** working day contracts
- **CD** calendar day contracts and;
- **A + B** or innovative contracts that provide incentive/disincentives to the contractor for early completion.

**Improvement Status:**

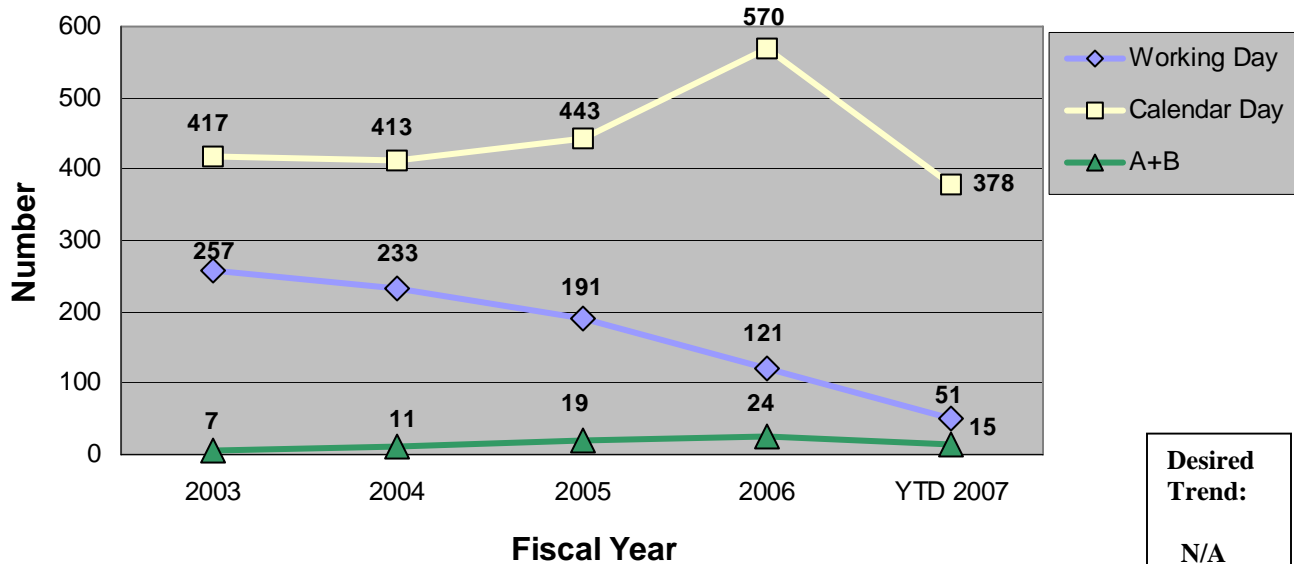
The greater use of A+B and calendar-day contracts resulted in a larger amount paid per calendar day. MoDOT's strategy of utilizing innovative contracting techniques has resulted in faster contract completion and fewer delays to the traveling public. Contract types are reviewed to make a determination of the most effective use of resources for timely completion of projects. Traditionally, there is a greater amount of work performed in the first quarter of the fiscal year due to optimal weather conditions.



### Average Construction Cost Per Day by Contract Type All Contract Types



### Average Construction Cost Per Day by Contract Type Number of Active Contracts



## Fast Projects That Are of Great Value

### *Unit cost of construction expenditures*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Travis Koestner, Contract Services Engineer

**Purpose of the Measure:**

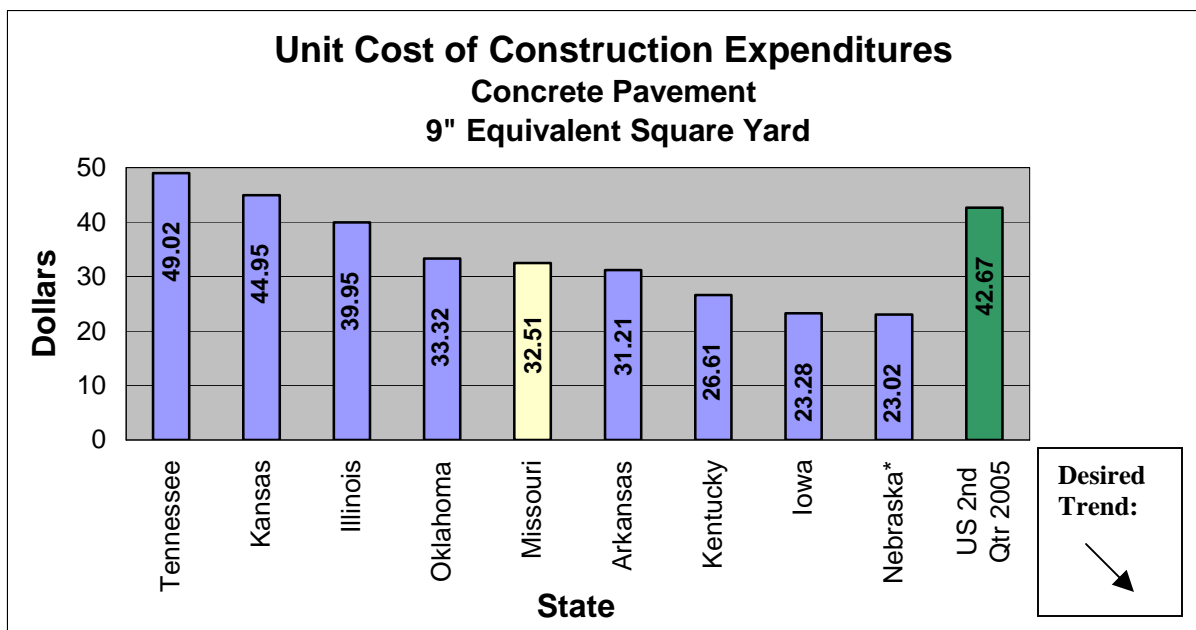
This measure tracks how MoDOT projects provide great value by comparing the cost of major items of work for MoDOT projects to other state DOTs.

**Measurement and Data Collection:**

Value in this measure has simply been related back to dollars per unit of measure. Completed in January 2006, the raw data, provided by an outside vendor, was categorized by MoDOT staff. This information will be updated again in January 2007.

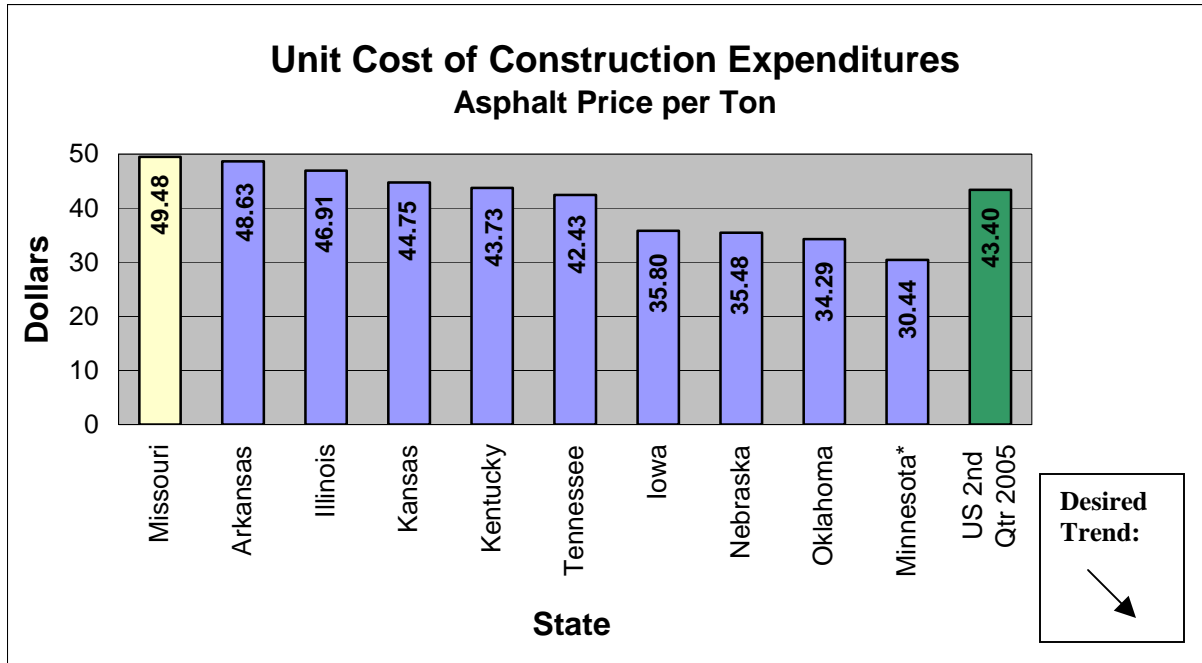
**Improvement Status:**

MoDOT customers should be able to gain an understanding of what it costs for a DOT to install an item of work. While value should not be defined as MoDOT prices per unit being the lowest as compared to other DOTs, prices can be compared keeping in mind that labor rates, material availability and general project conditions such as urban vs. rural will vary from state to state. MoDOT can use this information to gain an understanding of how prices in Missouri relate to surrounding states and eventually the rest of the country. MoDOT and surrounding states are seeing somewhat of a stabilization in prices due to the slowing of the petroleum market. It could be expected that prices would decline somewhat due to lower petroleum prices, but MoDOT has not experienced any decrease in prices thus far in fiscal year 2007. Prices, though, are no longer steadily increasing as was the case the last two years. MoDOT has realized good competition in the first quarter of FY07, averaging more than five bidders per proposal on major projects. This should result in prices closely reflecting market value.



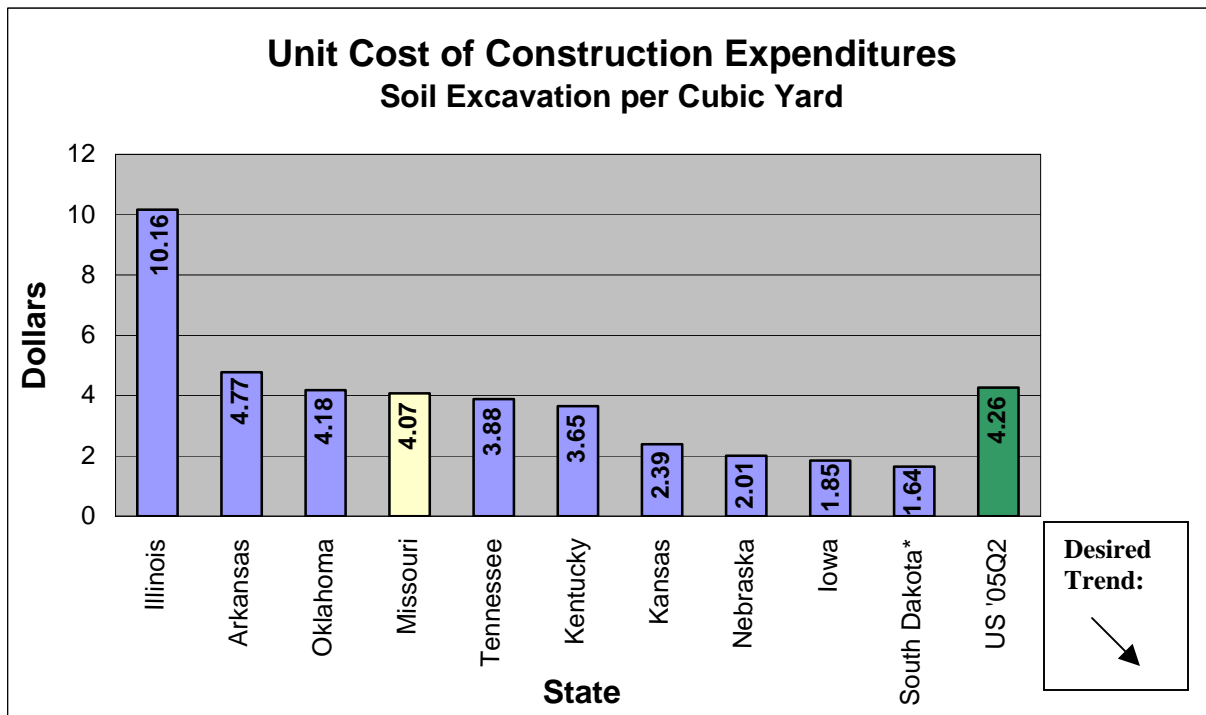
\*Lowest in US

Source Data for states other than Missouri from Oman Systems Bid Tabs Professional latest data available as of Jan. 1, 2006. Items included concrete pavement items paid for by the square yard converted to a 9-inch equivalent. U.S. Data from FHWA "Price Trends for Federal-Aid Highway Construction" Second Quarter 2005. Missouri Data from MoDOT bid history.



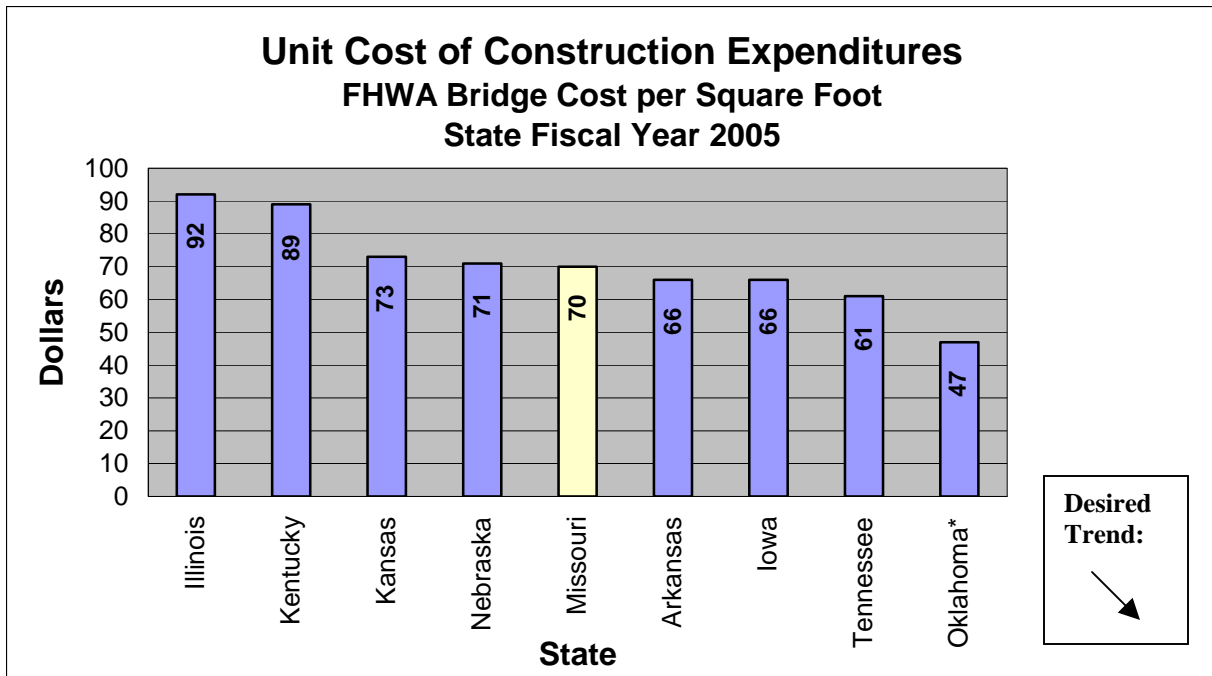
\*Lowest in US

Source Data for states other than Missouri from Oman Systems Bid Tabs Professional latest data available as of Jan. 1, 2006. Items included asphalt items paid for by the ton. U.S. Data from FHWA "Price Trends for Federal-Aid Highway Construction" Second Quarter 2005. Missouri Data from MoDOT bid history.



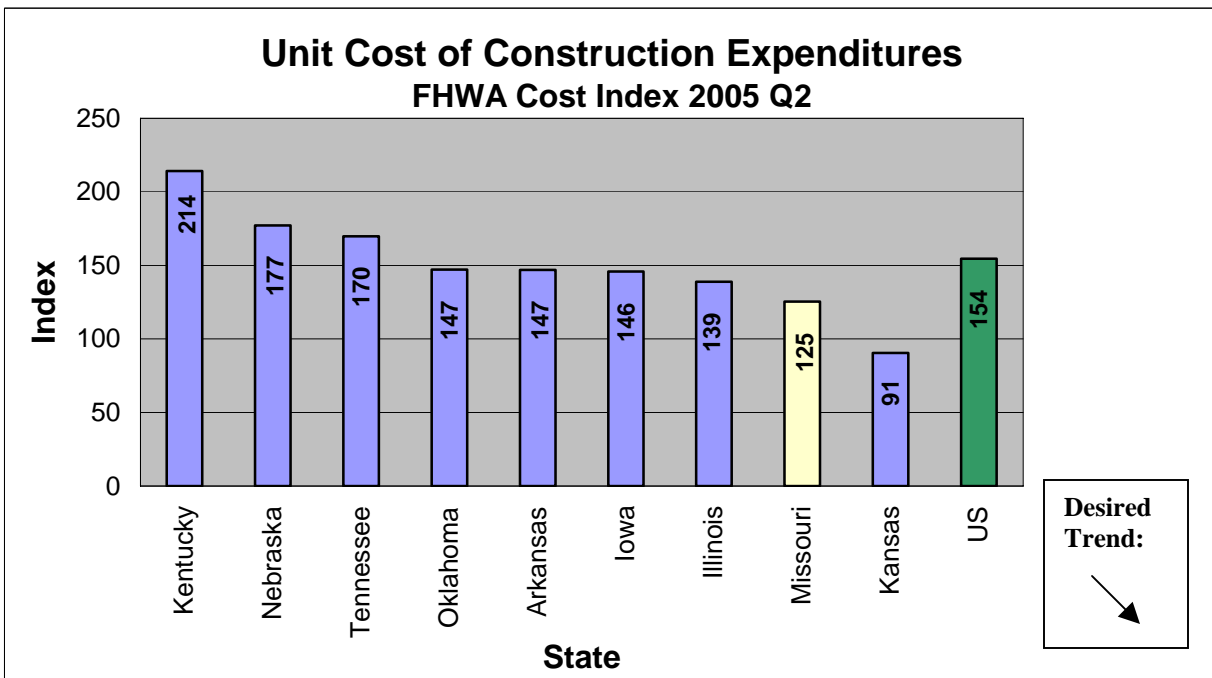
\*Lowest in US

Source Data for states other than Missouri from Oman Systems Bid Tabs Professional latest data available as of Jan. 1, 2006. Items include common excavation items paid for by the cubic yard. U.S. Data from FHWA "Price Trends for Federal-Aid Highway Construction" Second Quarter 2005. Missouri Data from MoDOT bid history.



\*Lowest in US

Source data from FHWA memo "Bridge Construction Unit Cost" dated Dec. 7, 2005. FHWA does not publish an average U.S. cost per square foot for bridges.



Source: "Price Trends for Federal-Aid Highway Construction" Second Quarter 2005.

## Fast Projects that are of Great Value

### *Annual dollar amount saved by implementing value engineering*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure tracks the amount of money MoDOT saves by implementing value engineering proposals.

**Measurement and Data Collection:**

Value engineering (VE) has saved MoDOT over \$270 million since 1988. VE achieves savings at the design phase and at the construction phase of a project. VE utilizes a team approach to refine the purpose and need and then develop innovative and creative ideas, which result in project savings while optimizing project performance. The VE team is usually independent from the project core team and includes participants from various disciplines both from within and outside of MoDOT.

Direct comparison to other states is challenging because of differences in construction program size and project development processes state by state.

**Improvement Status:**

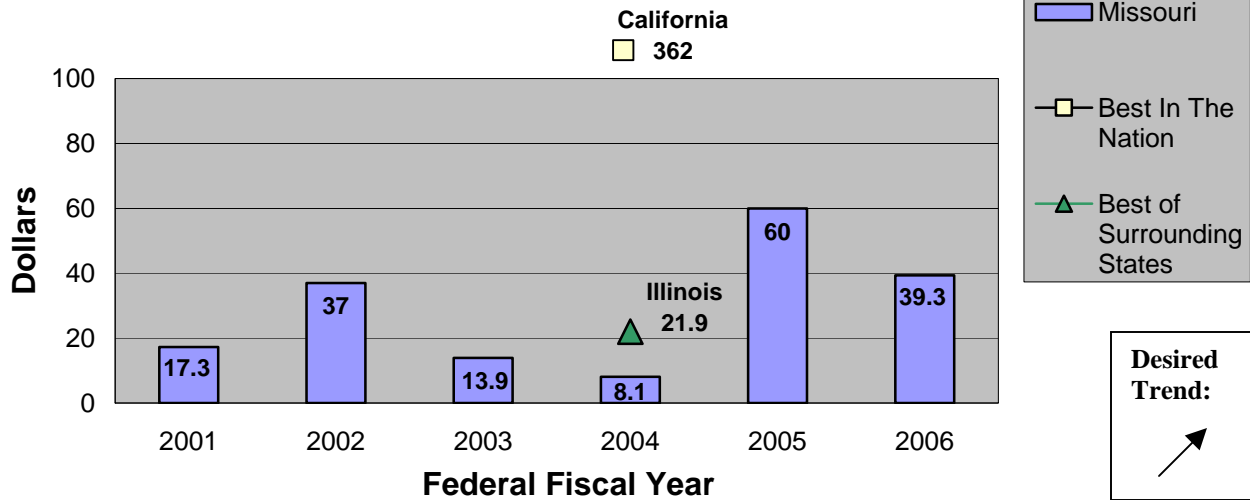
A recent emphasis on “Concept Stage” VE studies has proven to be successful at defining project scope and identifying basic functions of what the project must achieve. The focus has been to look at many concepts early in the project development process so that when a preferred concept is selected the design may continue with fewer challenges. By covering all the options early in the process, the design team gets answers sooner which saves on design time. Including external partners on VE teams will continue to prove valuable at building consent.

On the construction side, the implementation of the Performance Plus pilot program has increased the interest in VE studies by contractors. In addition, there has been a large effort to educate resident engineers on what VE studies are and their importance. Another component has been to encourage better reporting associated with the change order process. In 2006, construction savings from VE studies were \$3,270,000; a significant increase from past years.

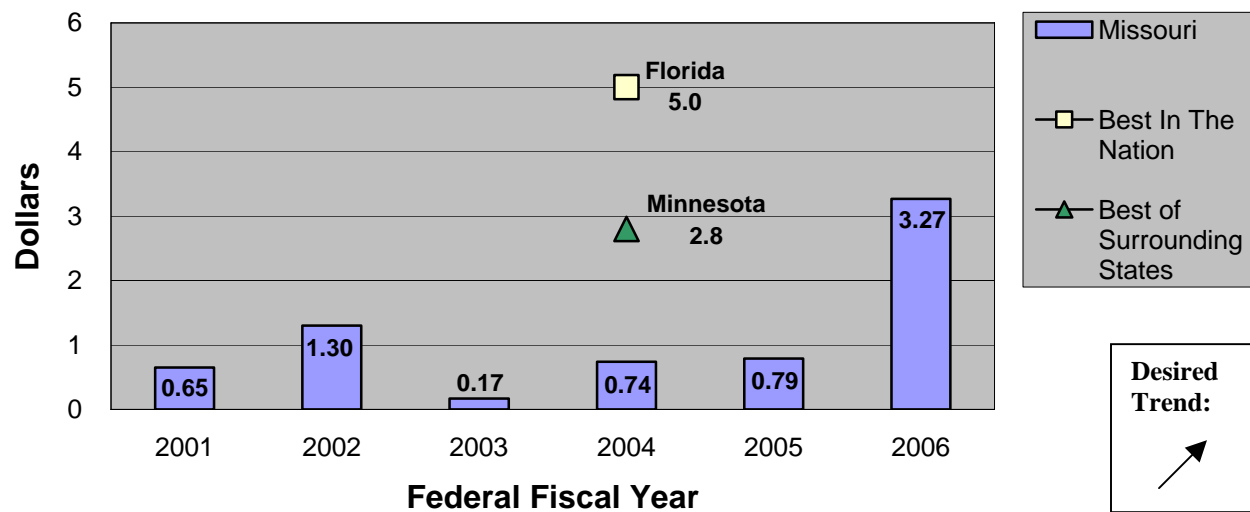
VE savings are reported annually to the Federal Highway Administration by each state and the results are available for Federal Fiscal Year 2004. For design phase savings, California is the best in the nation showing \$362 million implemented. For construction phase savings, Florida is the best in the nation showing \$5 million implemented. When compared to states similar to Missouri in program size, Illinois reported \$21.85 million saved during design and Minnesota reported \$2.8 million saved during construction.



# **Annual Dollar Amount Saved by Implementing Value Engineering Design Phase (in millions)**



# **Annual Dollar Amount Saved by Implementing Value Engineering Construction Phase (in millions)**



## Fast Projects that are of Great Value

### *Dollar amount saved by implementing practical design*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure tracks the amount of money MoDOT saves by implementing practical design concepts.

**Measurement and Data Collection:**

At the project level, significant innovations that result in cost savings can be realized through design modifications. These are variations from traditional standards to fit the individual characteristics and needs of a specific project. In MoDOT's new design environment, "Practical Design" is the umbrella for a more widespread application of this process. Practical design savings were previously reported as an annual lump sum for our 2005-09 STIP. During that initial implementation of practical design, \$400 million was saved and put back into the construction program.

Since that initial effort, practical design has been incorporated into all projects from the conceptual stages; it has become our way of doing business. As such, it would be impossible to continue to report on total program savings. Therefore, this measure has changed and is focusing on average savings by type of work.

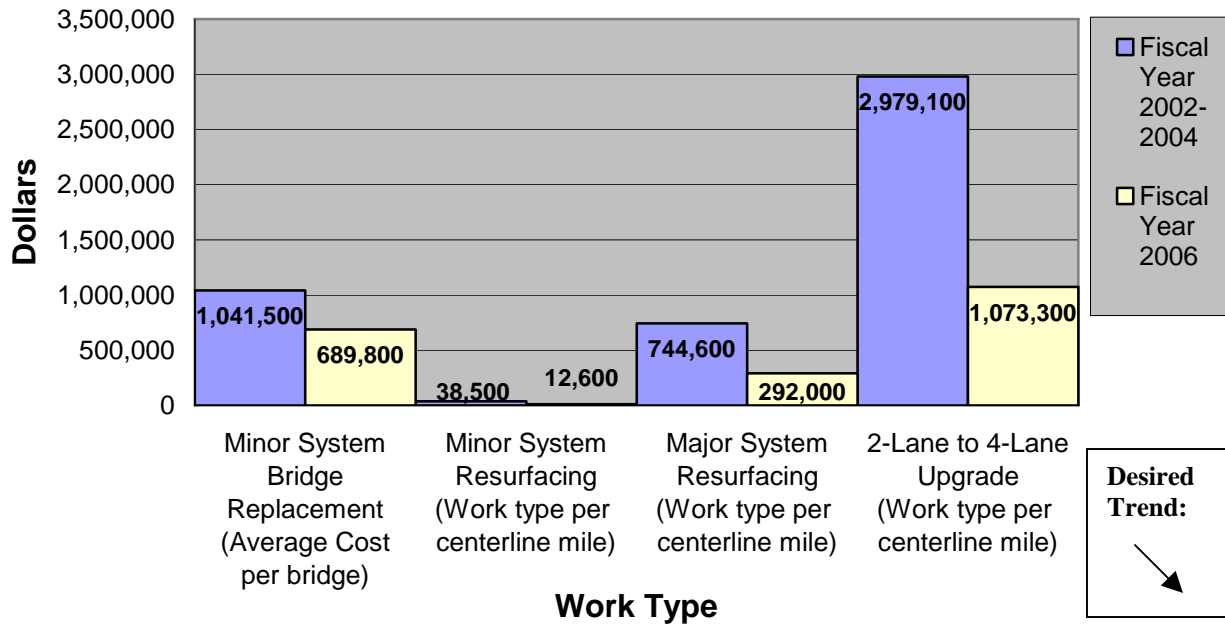
Projects were selected in four categories: Minor System Bridge Replacement, Minor System Resurfacing, Major System Resurfacing and Two-lane to Four-lane Upgrade. A comparison was made between project costs during fiscal year 2006 (post practical design) and projects awarded during fiscal years 2002-2004 (pre practical design) in each of the categories with costs inflated to 2006 as appropriate.

**Improvement Status:**

Practical design savings incorporated include:

- Minor System Bridge Replacement – Incentives such as closing a road for bridge replacement in the same location instead of bridge relocation; using a narrower width that matches the approach roadway width.
- Minor System Resurfacing – Using alternative methods such as chip seal or scrub seal instead of 1" Surface Level Course or 1 ¼" Bituminous Pavement.
- Major System Resurfacing – Reducing overlay thicknesses from 5 ¾" to 3 ¾"; using less cold mill before overlay; reducing shoulder thickness and width; using mill and fill instead of unbonded concrete overlay.
- Two-lane to Four-lane Upgrade: Cutting slopes and using existing right-of-way; using alternative methods of erosion control such as rock blanket instead of concrete slope protection.

## Dollar Amount Saved by Implementing Practical Design (Practical Design Comparison)



## Fast Projects That Are Of Great Value

*Percent of customers who feel completed projects are the right transportation solutions*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure provides information regarding the public's perception of MoDOT's performance in providing the right transportation solutions.

**Measurement and Data Collection:**

MoDOT districts have identified 30 projects – three per district – in three different categories (large – major route listed as or funded through major project dollars; medium – district-wide importance; and small – only local significance). These projects have been completed within the past year and are now open to traffic. Surveys have been directed to the users of each specific facility, and administered by MTI in collaboration with the Truman School of Public Affairs at the University of Missouri. This measure will be reported annually. Districts will continue to identify one project in each of the three categories to be surveyed, although it is recognized that in the future it might not be possible for every district to have three projects that meet the criteria each year.

Preliminary results will be available in mid-December to enable reporting in the January 2007 Tracker.

**Improvement Status:**

**Measure is Under  
Development**

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# Environmentally Responsible

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri's transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.



## Environmentally Responsible

### *Percent of projects completed without environmental violation*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. To be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. MoDOT must also comply with the environmental laws and regulations as it conducts its daily work in all areas of the organization.

If a violation is noted, it can result in either a Letter of Warning (LOW) or a Notice of Violation (NOV) to MoDOT. Letters of Warning can also be received as simply that, a warning to MoDOT of a special circumstance to be aware of, or for a situation that needs to be monitored so that a violation does not occur. For that reason, LOWs will never be eliminated, but should be kept to a minimum. However, it is unacceptable to the department to have a NOV.

**Measurement and Data Collection:**

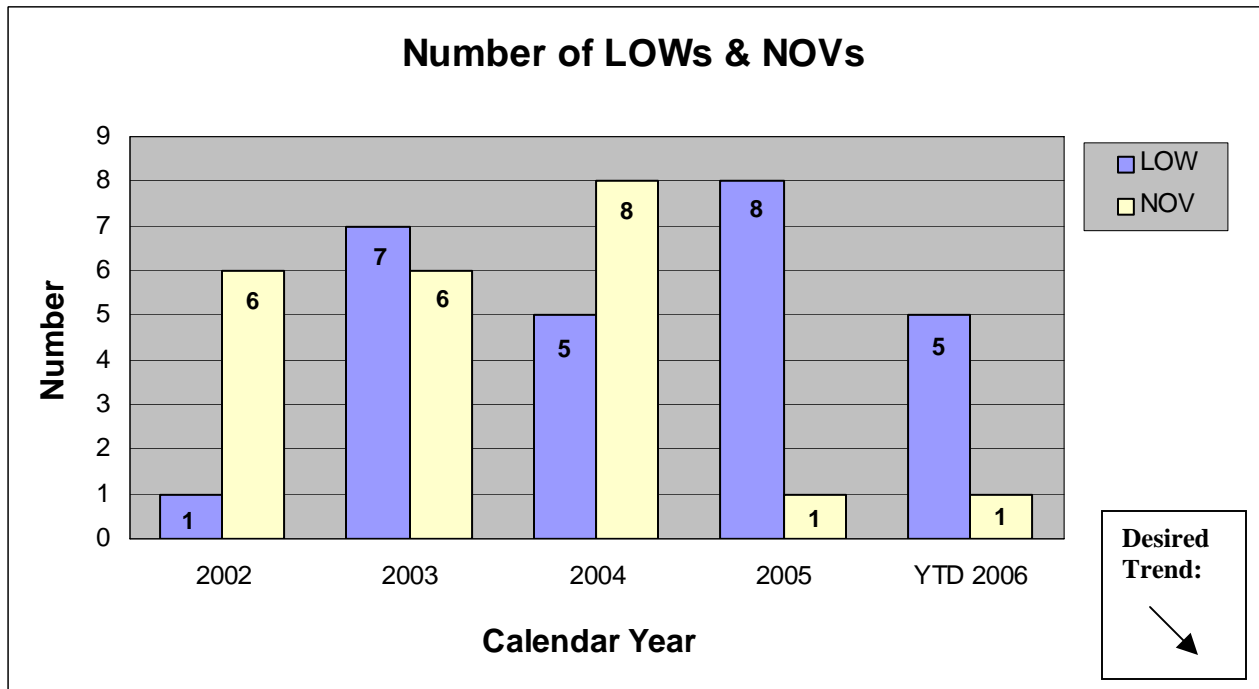
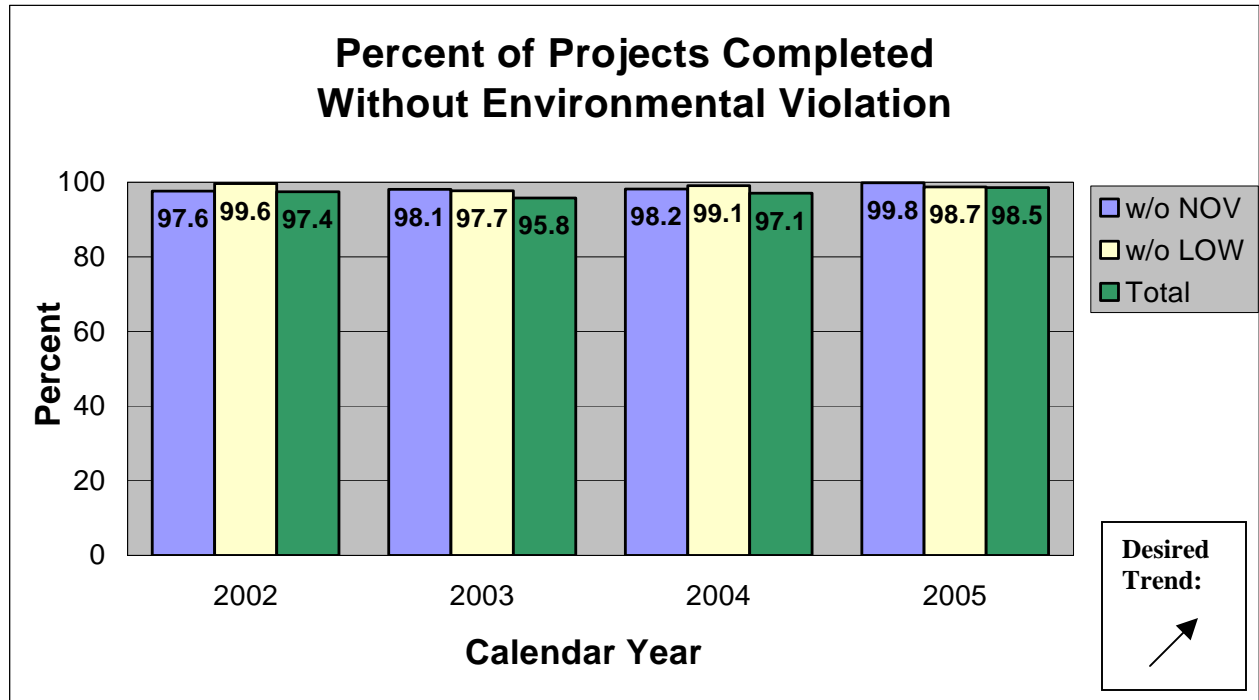
Both LOWs and NOVs are written correspondence to MoDOT from regulatory agencies, which are tracked in a MoDOT database by location or project number, as appropriate. Where tracked by project, the violations received may span several years. The first chart is based on a calendar year of construction projects reported to be completed during that year and the number of violations received on those projects over the life of the project. The second chart is a report by calendar year of the LOWs and NOVs received by the department for any activity.

**Improvement Status:**

The first graph shows a relatively level trend line for the past four years, while the second graph shows a significant decline in the total number of NOVs received in 2005, and that positive trend is continuing in 2006.

For the first three quarters of 2006, MoDOT has received one NOV and five LOWs. The NOV was for a contaminant discharge at a maintenance facility. Two of the LOWs were for failing to submit manifest summary reports in a timely manner; one was for a maintenance lot issue; one was for discharging contaminants from a construction project and the final one was for issues associated with hazardous waste labeling and storage.

In order to reduce the number of warnings associated with maintenance lots, the department conducted an inspection of each maintenance lot. The results of these inspections have been summarized in a report presented to leadership of the various impacted divisions. Reports have also been provided to and discussed with each district. Each district is reviewing the information and if appropriate, developing action plans to address any concerns that were noted.



Note: There is no benchmark data presented with this measure. MoDOT has a zero-tolerance policy towards NOVs, but recognizes LOWs will never be eliminated due to their nature. Therefore, regardless of what other states are doing, MoDOTs desired results are zero NOVs.

## Environmentally Responsible

### *Number of projects MoDOT protects sensitive species or restores habitat*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

**Purpose of the Measure:**

Missouri is home to many rare species of plants and animals, some of which are on the federal endangered species list. The Endangered Species Act of 1973 prohibits harm or harassment of these species. Avoiding or minimizing harm to these species and protecting or restoring their habitat is a fundamental obligation of this organization. Avoidance and/or protection are the first goals of our efforts, but under circumstances where avoidance cannot be achieved, restoration of habitat is a minimum acceptable result.

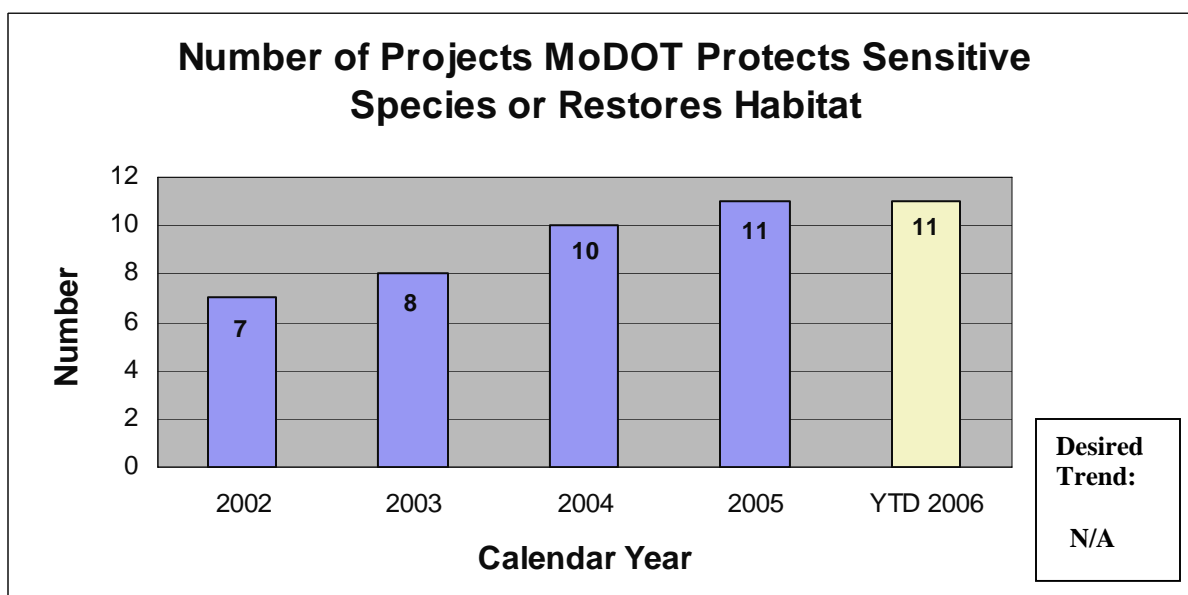
**Measurement and Data Collection:**

This measure is tracked annually by calendar year. On all MoDOT projects, the department investigates and informs the U.S. Fish and Wildlife Service of any activity in the vicinity of a known threatened or endangered species or critical habitat. Through this consultation with them, primarily through letters, MoDOT has the data to report on this measure. Because this measure focuses on projects that protect or restore sensitive habitats that could not initially be avoided, many MoDOT projects are not included in this data.

**Improvement Status:**

There is no desired trend with this measure; the number reported will fluctuate depending on the size of MoDOT's construction program each year, type of projects being constructed, location and the ability to make adjustments to avoid impacts on sensitive species or their habitat.

During the first half of 2006, there were 11 projects where MoDOT protected or restored sensitive species or habitat. These included the gray bat (three projects), Tumbling Creek cave snail, Indiana bat (three projects), pallid sturgeon, peregrine falcon, Niangua darter (two projects), Hine's emerald dragonfly and protected mussels.





## Environmentally Responsible

### *Ratio of acres of wetlands created compared to the number of acres of wetlands impacted*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

#### **Purpose of the Measure:**

Wetlands are a valuable resource in Missouri, having beneficial functions such as wildlife habitat, flood storage and water quality improvement. In addition to these benefits, it is required in the Clean Water Act that impacts to wetlands are avoided, minimized or that wetlands are recreated when a wetland is destroyed during a transportation project. The national goal set by the FHWA for recreating wetland is to construct 1.5 acres of wetland for every 1.0 acre of wetland impacted. Recreating wetlands at this ratio helps to offset the lost beneficial functions during the time it takes for a wetland to develop. This measure helps ensure that MoDOT is doing its part to maintain wetlands in Missouri.

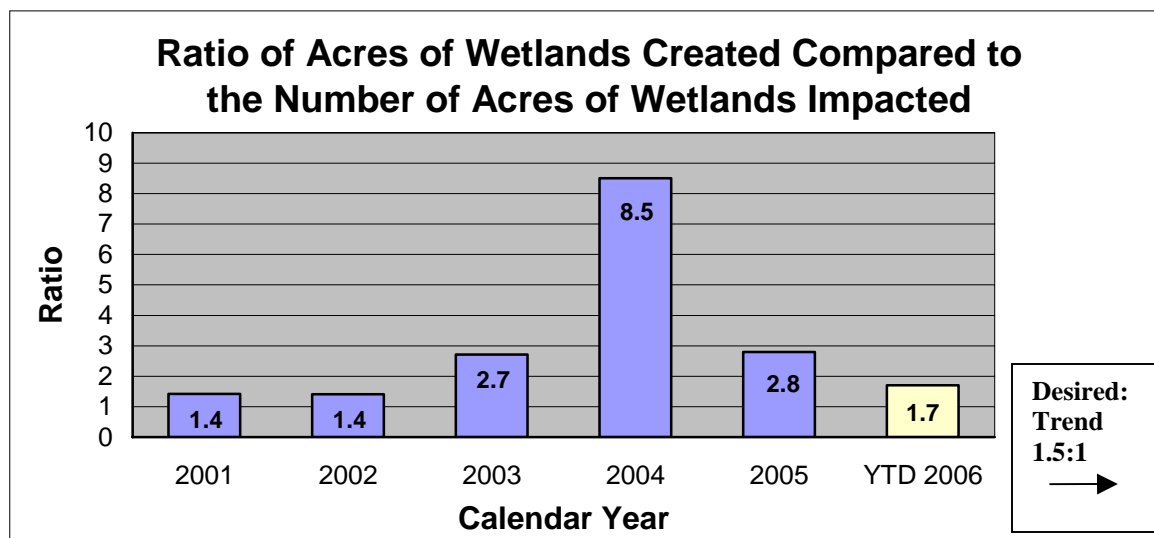
#### **Measurement and Data Collection:**

Data for this measure is calculated by comparing acres of project impacts taken from Clean Water Act permits to acres of wetland constructed, as shown in roadway design plans or by calculating the actual wetland areas recreated by MoDOT, or wetland mitigation purchased from a commercial wetland bank. Impacts may occur in a different year from the mitigation, so for the purposes of this measure, the timeframe for the reporting is when the mitigation construction is complete based on a calendar year.

Since this measure is also tracked by FHWA, MoDOT contacted states that are successful at meeting the 1.5 to 1 ratio. Most of the states queried said that the biggest factor in meeting the ratio is in the use of wetland mitigation banks. They had greater control over achieving their target ratios and more ecologically successful wetland mitigation. MoDOT has a statewide umbrella wetland mitigation banking agreement. Two proposed wetland banks are in the review stages with the regulating agencies.

#### **Improvement Status:**

So far in 2006, MoDOT moved towards the desired ratio by replacing wetlands at a rate of 1.7 to 1. Although this represents only two mitigation projects built this year, statewide training targeting the interpretation and attention paid to wetland development plans was conducted with construction inspectors and resident engineers to help achieve this improvement over previous years. MoDOT is placing all mitigation on as-built plans to reduce mitigation for encroachments on wetland mitigation projects.



## Environmentally Responsible

### *Percent of air quality days that meet Environmental Protection Agency standards by metropolitan area*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

**Purpose of the Measure:**

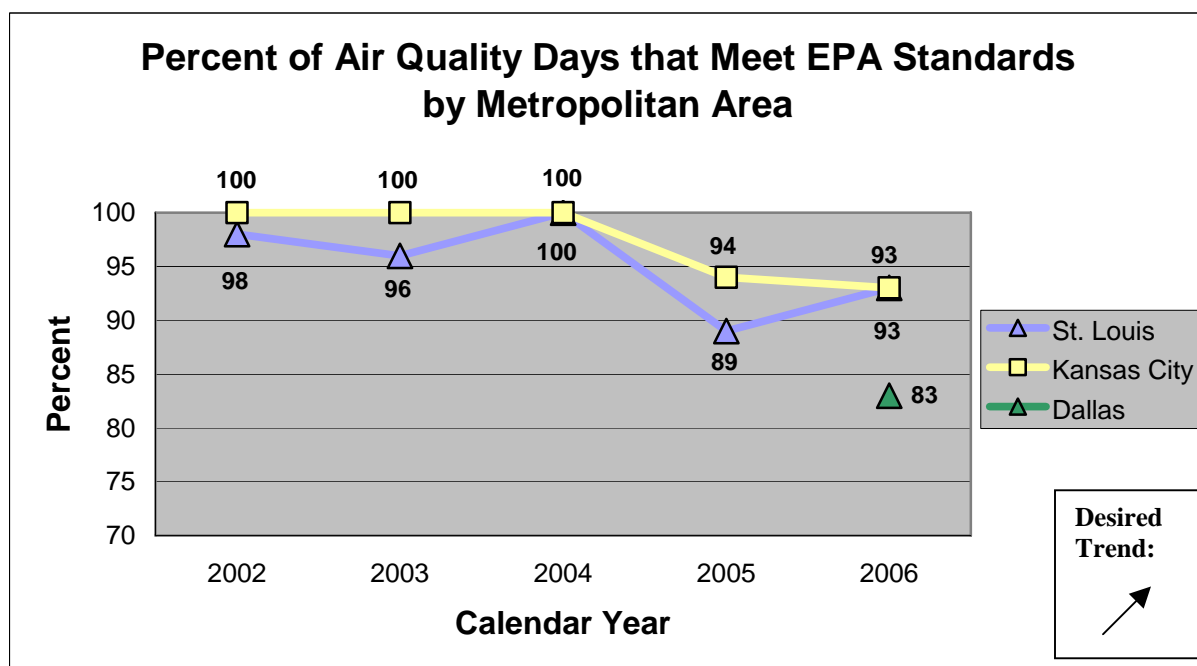
This measure tracks MoDOT's role in improving the air quality of Missouri's metro areas. The Environmental Protection Agency approves state plans to improve air quality. MoDOT makes every effort to design and build roads that improve air quality in affected areas.

**Measurement and Data Collection:**

EPA establishes air quality standards including ozone for the United States. The ground level ozone standard affects Missouri. Ozone readings are collected in Kansas City and St. Louis during the ozone season – April through October. The data contained in the table below reflects the available percentage of days, by metro area, that met the EPA's ground-level ozone standard. The data for Missouri's 2006 ozone season is now included. Beginning in 2006, MoDOT will compare ozone exceedances to the Dallas, Texas, metropolitan area. Generally, Dallas is being compared to Missouri cities because of its similar distance to other cities that affect its air quality. Dallas also has relatively the same kind of pollutants.

**Improvement Status:**

MoDOT's efforts, coupled with milder than normal weather in 2004, contributed to 100 percent positive air quality days as measured by EPA standards. Changes to more strict EPA standards and warmer than normal weather during the 2005 ozone season contributed to a reduction in the percentage of positive air quality days. MoDOT continues to serve on the Air Quality Forum Committee in Kansas City and the Air Quality Advisory Committee in St. Louis. MoDOT staff attends monthly meetings to review these committees' programs and ensure that both regions continually work to improve the air quality for Missouri citizens. MoDOT is committed to improving the region's air quality through modifying daily work-related operations, modifying employees' actions, education, providing information to the public, being a leader in air quality improvements, managing congestion to reduce emissions, providing alternative choices for commuters, and promoting the use of environmentally friendly fuels and vehicles.



## Environmentally Responsible

### *Percent of alternative fuel consumed*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave DeWitt, Deputy Administrative Officer

**Purpose of the Measure:**

This measure tracks the use of alternative fuels. It shows MoDOT's contribution toward environmental responsibility and conservation of resources.

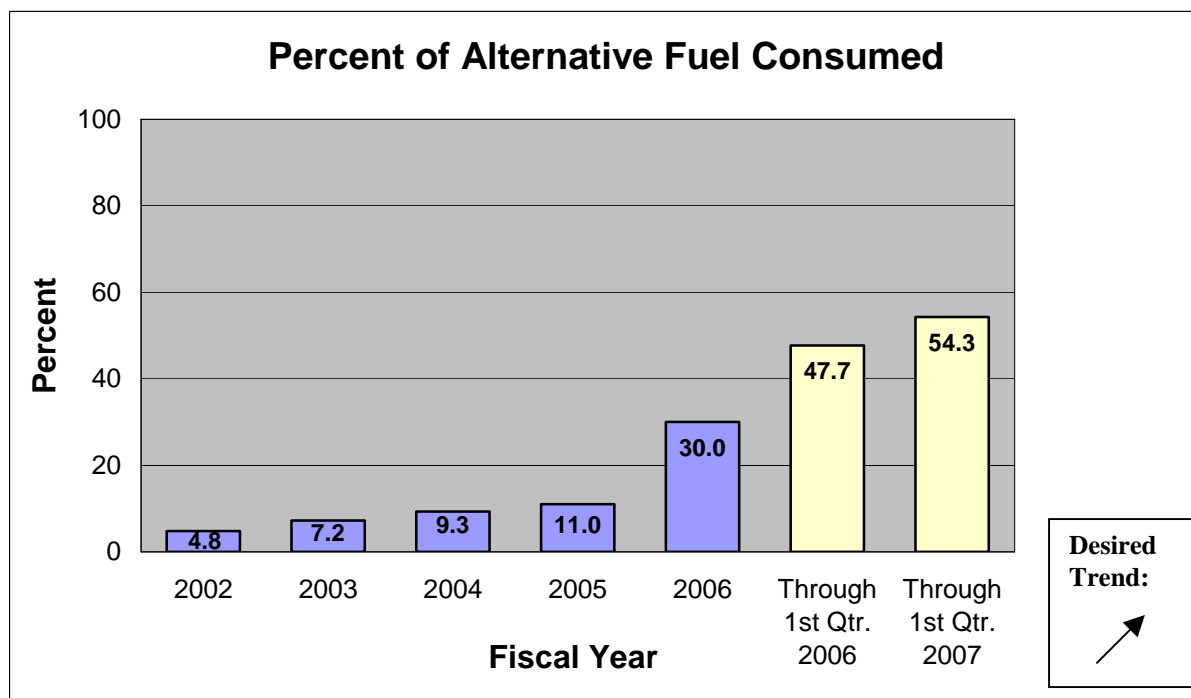
**Measurement and Data Collection:**

Alternative fuel is E-85 and biodiesel. When a user pumps fuel into a MoDOT vehicle or piece of equipment, that usage by gallon and by fuel type is captured in the SAM II system. Reports are generated to extract the number of gallons used from that system.

**Improvement Status:**

There was an increase in the usage of alternative fuels in the first quarter of FY 2007. The percent of alternative fuel consumed was 54.3 percent during the first quarter compared to 47.7 percent during the first quarter of FY 2006. The use of E-85 has increased by more than 57 percent for the same period of FY 2007. The increase is due to the addition of a new E-85 tank in District 6. There have been over 1,800 gallons of E-85 used at this site in the first quarter of FY 2007. The usage of biodiesel for the first quarter of FY 2007 is also up to 87.9 percent of total diesel compared to 78.3 percent the first quarter of FY2006. The increase is most evident in districts 6 and 9, which have had availability issues in the past. The first quarter typically has the highest usage of alternative fuel. There will be a decrease in the remaining quarters due to discontinuing the use of biodiesel during the winter months from Nov. 1 through March 31.

The department currently operates three E-85 bulk fuel stations in Districts 1, 6 and the Central Office. The District 7 tank is operational; however, E-85 is currently not available. Installation of the E-85 tank in District 4 will be complete by the end of November.



## Environmentally Responsible

### *Number of historic resources avoided or protected as compared to those mitigated*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Reeder, Historic Preservation Coordinator

**Purpose of the Measure:**

Federal historic preservation laws relating to federally-funded projects, gaining public and agency support for particular projects, and general environmental stewardship require MoDOT to avoid, minimize or mitigate project impacts to historic buildings and bridges whenever feasible. Compiling information about project impacts to important cultural resources provides a measure of MoDOT's success at avoiding, protecting or mitigating project impacts to important cultural resources.

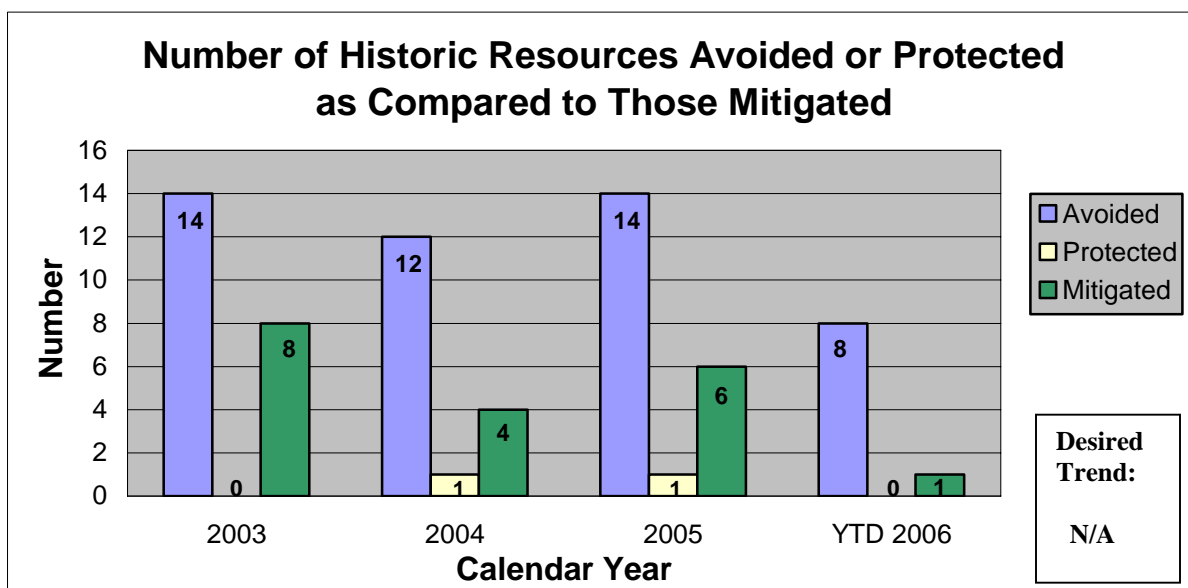
**Measurement and Data Collection:**

Data collection begins at the approved Conceptual Plans stage for projects. As project design plans and right of way plans are prepared by the district, department staff track the number of historic resources in project footprints and the number of resources that can be avoided or protected by MoDOT revising the design of a project versus the number of resources MoDOT can not avoid and must be mitigated. The data include only historic resources identified as potentially affected by projects after the conceptual plan stage. The data do not include historic resources avoided during early project planning or those avoided during consideration of different alignments during NEPA studies.

**Improvement Status:**

Early project design was able to avoid impacts to all but one historic property. Of the nine historic properties identified at the conceptual plan stage as being impacted by projects, MoDOT was able to redesign the project in the final stages to avoid impacts to eight of the resources. The only significant historic resource that could not be avoided was a historic house that had project impacts mitigated through the preparation of detailed photographic and historical documentation.

This measure has no overall desired trend. For any year, data for the measure will vary due to the number of projects in the MoDOT program and the specific nature of those projects. However, the overall effectiveness of MoDOT's historic preservation efforts is reflected by all of MoDOT's activities resulting in the required mitigation of project impacts to only one historic resource during the first three quarters of 2006.



## Environmentally Responsible

### *Number of tons of recycled/waste materials used in construction projects*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Joe Schroer, Field Materials Engineer

**Purpose of the Measure:**

This measure tracks MoDOT's efforts to be environmentally conscious while being fiscally responsible through the use of recycled/waste material when applicable.

**Measurement and Data Collection:**

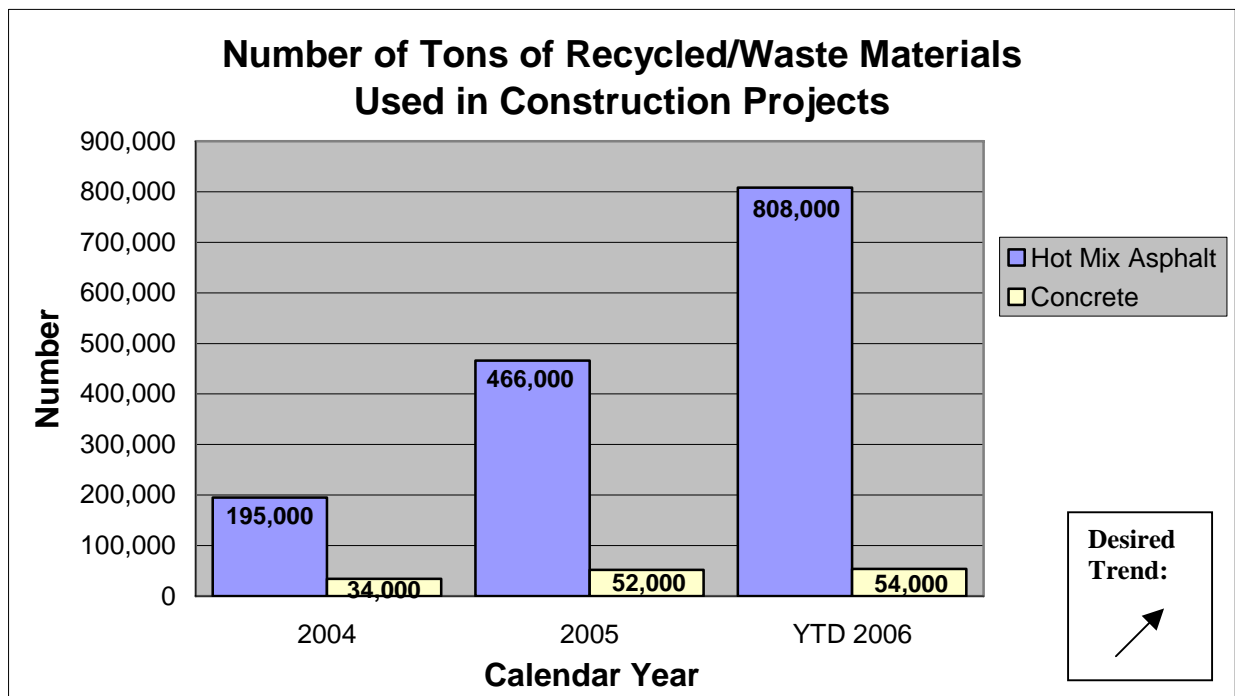
The number of tons of recycled/waste material used in construction projects is measured through MoDOT's construction management database which tracks material incorporated into projects. Data is collected on an annual basis due to the seasonal nature of the construction.

**Improvement Status:**

The use of recycled/waste materials will double over that reported for last year. Completion of the Smooth Roads Initiative before the end of this year has driven a large portion of the increased use in hot mix asphalt (HMA.) Specification changes, industry initiatives and promoting the use of some recycled products has resulted in 14 percent of all HMA placed being recycled/waste materials. A significant factor contributing to the increased use of recycled asphalt pavement (RAP), which accounts for half of the total recycled material, is the escalation of liquid asphalt prices. Use of RAP in mixtures rose along with the price of asphalt. Only one asphalt contractor is not currently using RAP in its mixtures.

Ground tire rubber (GTR) became another recycled material added to the list of materials counted. Three projects consumed 425 tons of GTR; the equivalent of over 53,000 passenger car tires. MoDOT is currently examining the performance of mixtures containing GTR and the best way to incorporate GTR into the asphalt mixtures.

The increased use of recycled materials in concrete pavements is due to specification changes allowing greater amounts of ground granulated blast furnace slag and fly ash.



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# Efficient Movement of Goods

*Tangible Result Driver – Dave DeWitt,  
Deputy Administrative Officer*

Missouri's location in the nation's center makes it a major cross-roads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.





## Efficient Movement of Goods

### *Freight tonnage by mode*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Brian Weiler, Multimodal Operations Director

**Purpose of the Measure:**

This measure tracks trends and indicates diversification of freight movement on Missouri's transportation system.

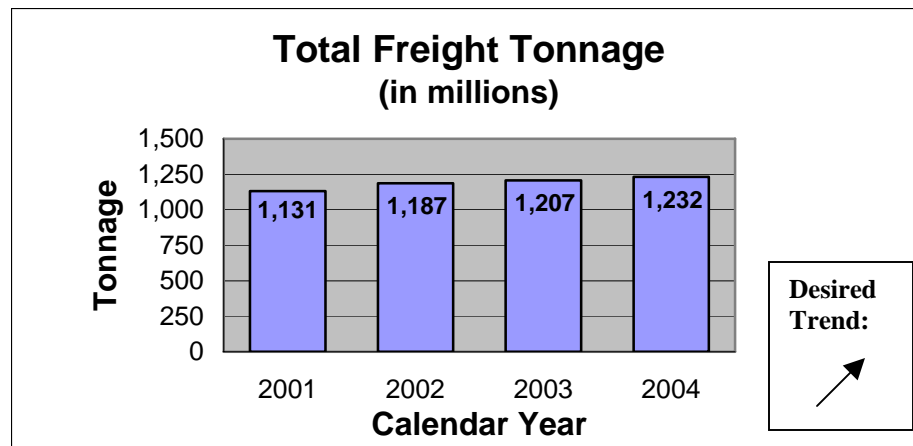
**Measurement and Data Collection:**

Port tonnage is reported to MoDOT from public ports. Air cargo data is collected via mail survey to commercial airports with known cargo activity. Rail tonnage is obtained from the Association of American Railroads. MoDOT calculates motor carrier freight movement using commercial vehicle miles traveled, trip length per shipment and average truck cargo weight.

**Improvement Status:**

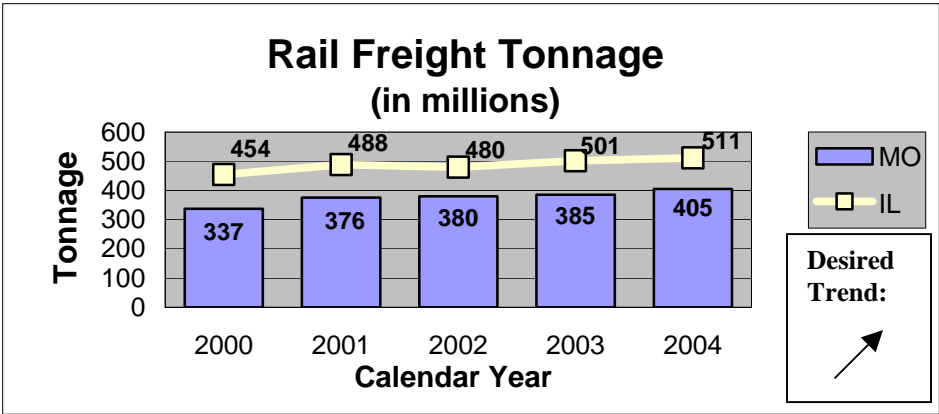
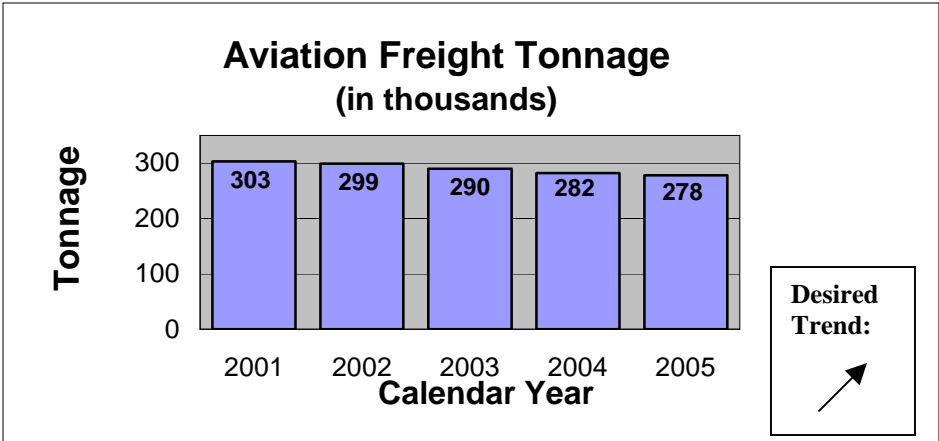
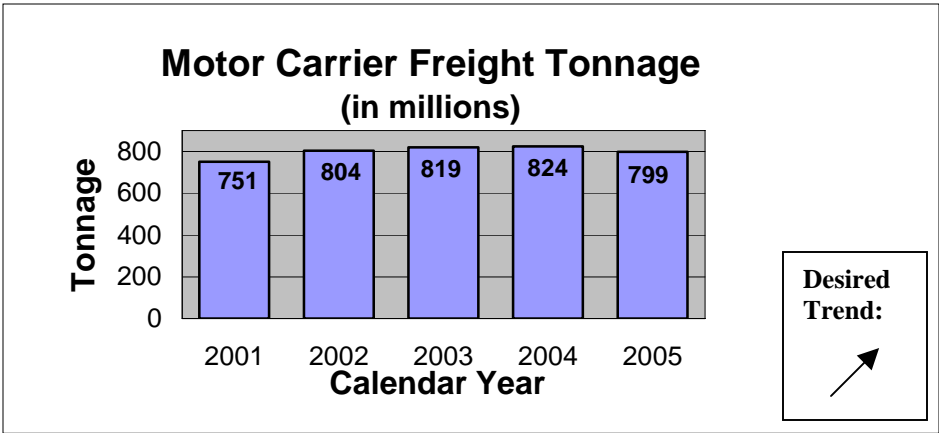
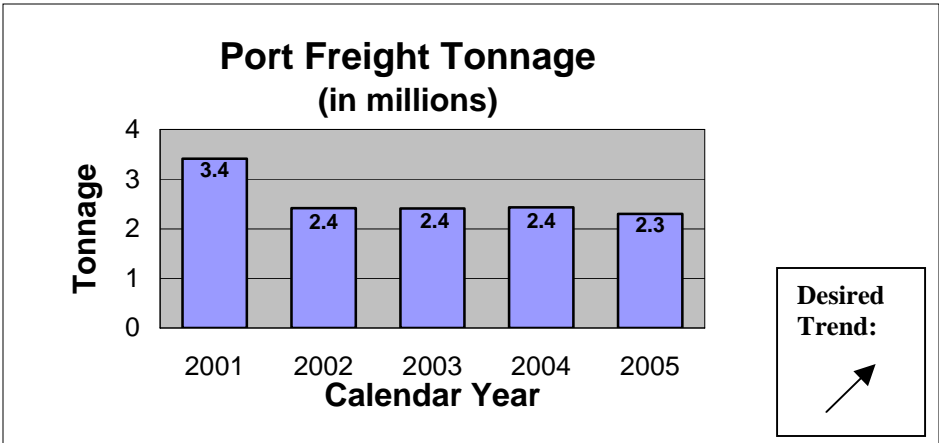
Total freight tonnage for all modes exceeds 1.23 billion tons, which reflects positive economic growth and development for Missouri. Port tonnage has remained relatively steady since 2001 despite low flows on the Missouri River. The 2005 amounts show a slight decrease due primarily to navigation impacts from Hurricane Katrina on the Mississippi River. Long-term growth of river transportation is hampered by an inadequate lock and dam system on the Upper-Mississippi River above St. Louis. MoDOT supports a federal proposal from the Corps of Engineers to update and expand this system. Motor carrier freight tonnage had experienced steady growth since 2001, but it declined by three percent in 2005 mainly due to impacts from higher diesel fuel costs. MoDOT has implemented several process improvements and outreach efforts to streamline motor carrier registration and inspection services.

Aviation tonnage continues to be impacted by a downturn in the aviation industry from 9-11 and the resulting financial impacts to airlines, which carry a significant portion of air cargo. Commercial airports are under the jurisdiction of the Federal Aviation Administration; however, MoDOT's Aviation Advisory Committee helps identify ways to better support the commercial aviation industry. The recently opened new W1W runway at Lambert St. Louis adds significant system capacity, but it is too early to tell if this will increase aviation tonnage. Rail freight tonnage grew five percent from 2003 to 2004, and demand remains strong despite system capacity issues. MoDOT is funding a capacity analysis through the University of Missouri to identify specific rail infrastructure projects that will improve both freight flow and passenger rail reliability on Union Pacific's mainline between St. Louis and Kansas City. The 2005 rail tonnage amount is expected to be available for the January 2007 Tracker.



2005 data for rail tonnage is not available at this time.





## Efficient Movement of Goods

### *Average travel speeds for trucks on selected roadway sections*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Michelle Teel, Assistant Motor Carrier Services Director

**Purpose of the Measure:**

This measure tracks average truck travel speeds on selected roadway sections. MoDOT recognizes the efficient movement of trucks is critical to the economy. Timely, reliable goods movement allows businesses to reduce manufacturing and inventory costs and improve responsiveness to rapidly changing markets. The desired trend is for the average truck speeds to approach the posted speed limit (the average speed limit on I-70 in Missouri is 67 mph.)

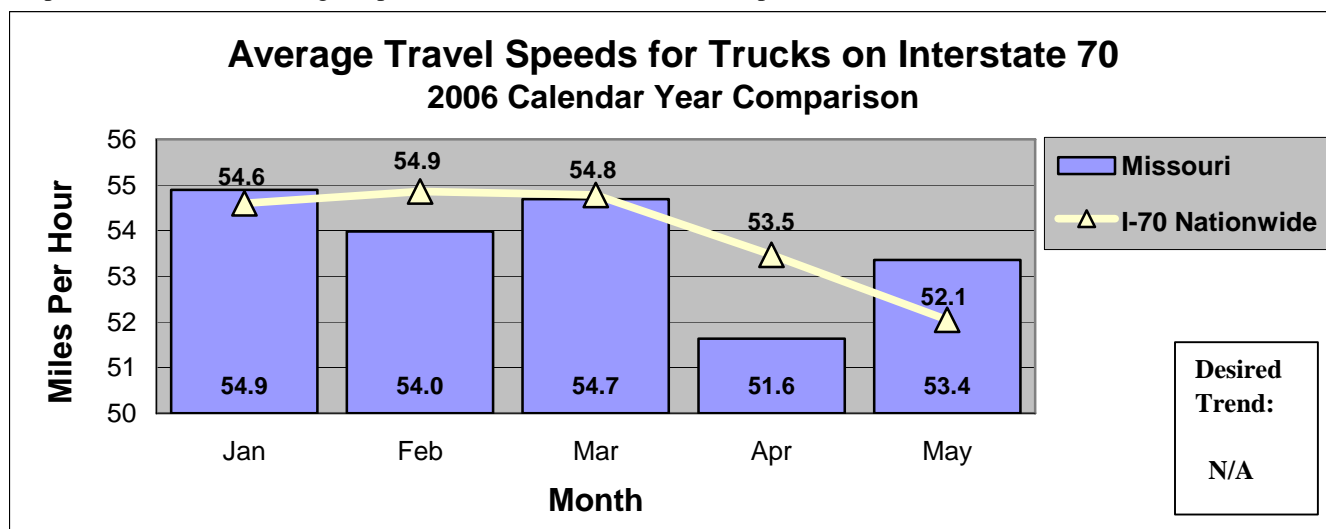
**Measurement and Data Collection:**

The Federal Highway Administration launched the Freight Performance Measure initiative to monitor truck travel speeds in freight-significant corridors, including Interstate 70. In 2002, the FHWA established a partnership with the American Transportation Research Institute to determine whether and how information from communication technologies used by the freight industry could provide data to support freight performance measures. ATRI worked with technology vendors and commercial carriers to demonstrate that after removing all information except time and location data, communication technologies can be used to derive travel speeds measures. Preliminary research data, including truck travel speeds on I-70 nationwide, is available from FHWA. This data allows MoDOT to measure Missouri's truck performance on I-70 compared to I-70 nationwide. Additional Missouri routes may be added in the future, including Interstates 55, 57, and 35. MoDOT was recently selected as a case study state to further improve and enhance the FHWA Freight Performance Measurement initiative.

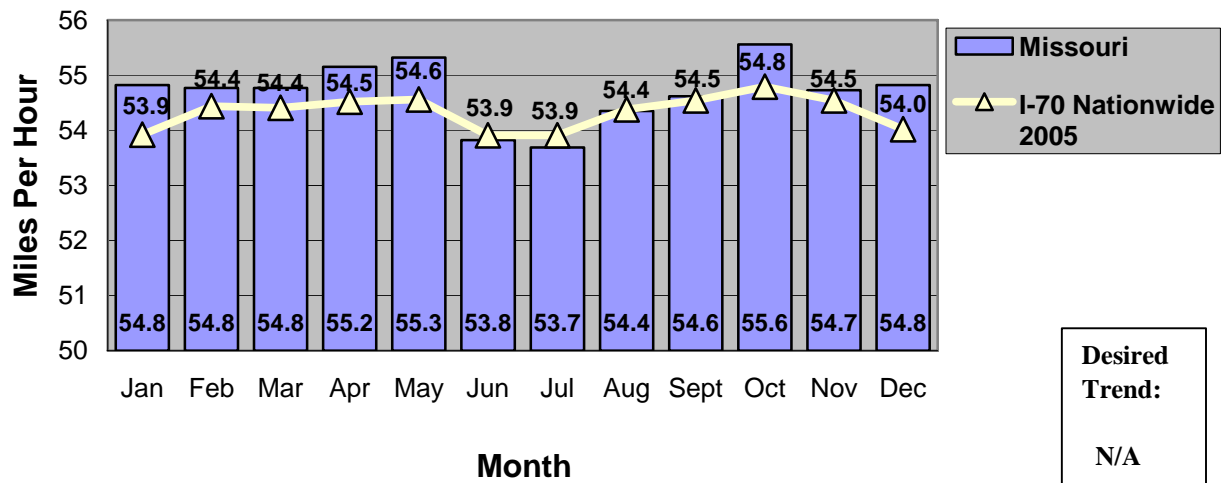
**Improvement Status:**

Live traffic data for three Missouri metro areas is available on MoDOT's Web site. Motorists use Kansas City Scout, St. Louis' Gateway Guide and Springfield's Ozarks Traffic Web pages to check conditions on their planned and alternate routes. Motorists also base decisions on information found on work zone and road condition maps found on MoDOT's Web site. Dynamic message signs are used to relay information to those already on the road.

MoDOT's increased emphasis on work zone and incident management and the efforts of the I-70 and I-44 corridor teams resulted in many traffic flow improvements. Nevertheless, data indicates that average travel speed on I-70 decreased in April and May. This could be due to increased work zone activity on I-70. However, because Missouri's average travel speed and that for I-70 nationwide decreased the same month ATRI implemented a new data processing system, it may be necessary to adjust these results once final ATRI system assessments are complete. Data for June through September was unavailable at time of publication.



## Average Travel Speeds for Trucks on Interstate 70 2005 Calendar Year Comparison



## Efficient Movement of Goods

### *Percent of trucks using advanced technology at Missouri weigh stations*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Barbara Hague, Special Projects Coordinator

**Purpose of the Measure:**

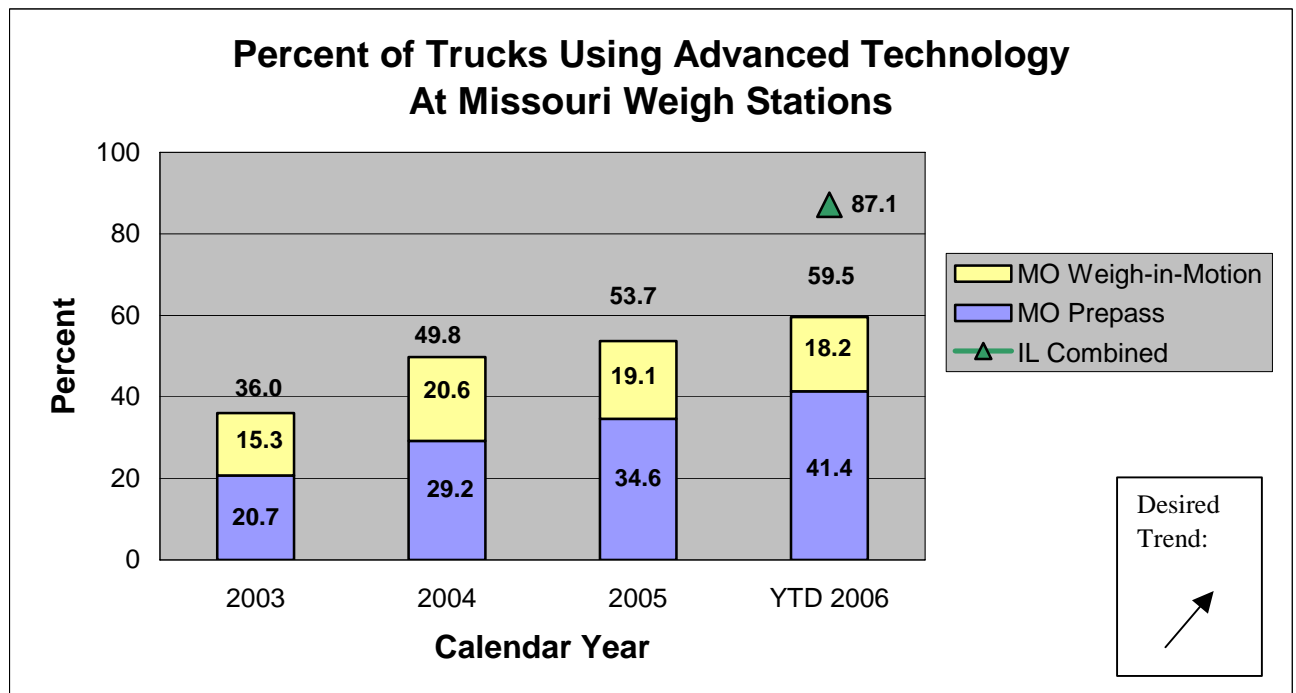
This measure indicates motor carriers' acceptance of tools designed to improve the flow of freight traffic on Missouri highways.

**Measurement and Data Collection:**

Data is collected by HELP, Inc.'s PrePass system computers which scan transponder-equipped vehicles as they approach 19 Missouri weigh stations. Pavement sensors check the vehicle's weight while computers review MoDOT's records to determine the carrier's compliance with safety, insurance and other state and federal regulations. Drivers are notified to stop or are allowed to continue without delay. Carriers that comply with state and federal regulations save time and money. The Missouri State Highway Patrol provides a quarterly measure of the number of trucks that use Missouri's weigh-in-motion scales located at Mayview and Foristell. These scales measure weight as trucks pass over them at 40 mph. Using ramp scales rather than verifying weight on fixed scales that require a full stop saves both time and money.

**Improvement Status:**

Missouri saw a slight decrease in the number of vehicles weighed using advanced technology in the third quarter. The year-to-date totals are holding around 60 percent. Updated data from the State of Illinois for the benchmark was not available at time of publication. Benchmark data in the chart is limited to the first calendar quarter of 2006.



## Efficient Movement of Goods

### *Interstate motor carrier mileage*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Joy Prenger, Accounting Services Supervisor

**Purpose of the Measure:**

This measure reports the fluctuations of motor carrier freight movement in Missouri. MoDOT uses the information to help facilitate freight movement and to monitor quarterly fuel tax rate(s) and carriers' voluntary compliance with fuel tax requirements.

**Measurement and Data Collection:**

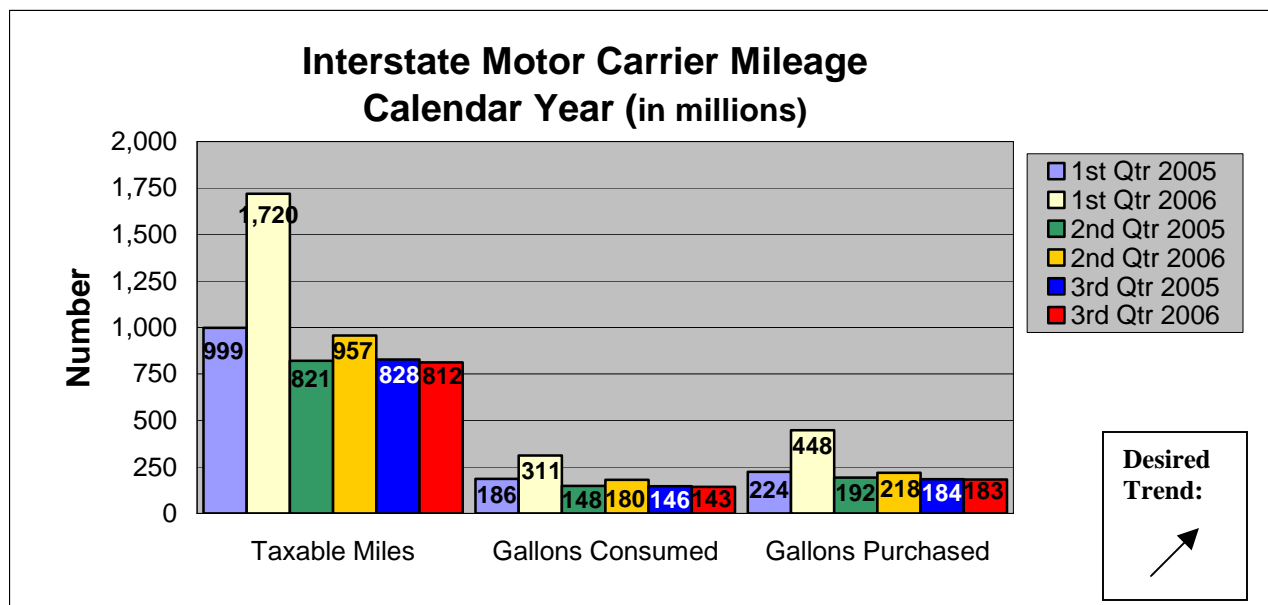
Data is collected quarterly. Total taxable miles traveled in Missouri by Missouri-based carriers and carriers based in International Fuel Tax Agreement (IFTA) member states and provinces are tracked using IFTA tax returns and member state and provinces' monthly transmittals. This information is used to reflect freight movement, support revenues and to track usage from the motor fuel tax refund appropriation.

**Improvement Status:**

During the third quarter of 2006, the reported diesel fuel price average for the Midwest region was \$2.459 per gallon compared to the second quarter average of \$2.887. The American Trucking Association and the Energy Information Administration forecast the average price of diesel at \$2.60 per gallon for the remainder of the year. It is estimated the trucking industry will spend \$98.3 billion on fuel in 2006.

MoDOT Motor Carrier Services successfully implemented an IFTA filing program in its Web-based system in April. Fifteen percent of eligible customers took advantage of online IFTA filing and payment. This quarter, MCS is able to provide comparative data for 6,386 Missouri-based carriers.

Third quarter data indicates that Missouri-based carrier mileage decreased by nine percent. The mileage of carriers traveling on Missouri highways but licensed in other member jurisdictions was nearly even, down less than one percent. Overall, Missouri taxable miles decreased by two percent, gallons consumed decreased by two percent and purchases decreased by less than one quarter of one percent.



## Efficient Movement of Goods

### *Percent of satisfied motor carriers*

**Results Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Mary Jo Pointer, Motor Carrier Manager

**Purpose of the Measure:**

This measure tracks MoDOT's progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT's Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

**Measurement and Data Collection:**

MCS personnel, working with the Missouri Transportation Institute, developed a survey to collect customer satisfaction data. A single survey addressed all four MCS program divisions, International Registration Plan/International Fuel Tax Agreement, Over-dimension/Overweight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the service(s) they use when doing business with MCS, then indicated their level of satisfaction with 12 customer service factors such as "timely response", "friendly", "respectful", and "outcome". They also gave an "overall satisfaction" score. Customers used a four-point scale ranging from 4=Very Satisfied to 1=Very Dissatisfied.

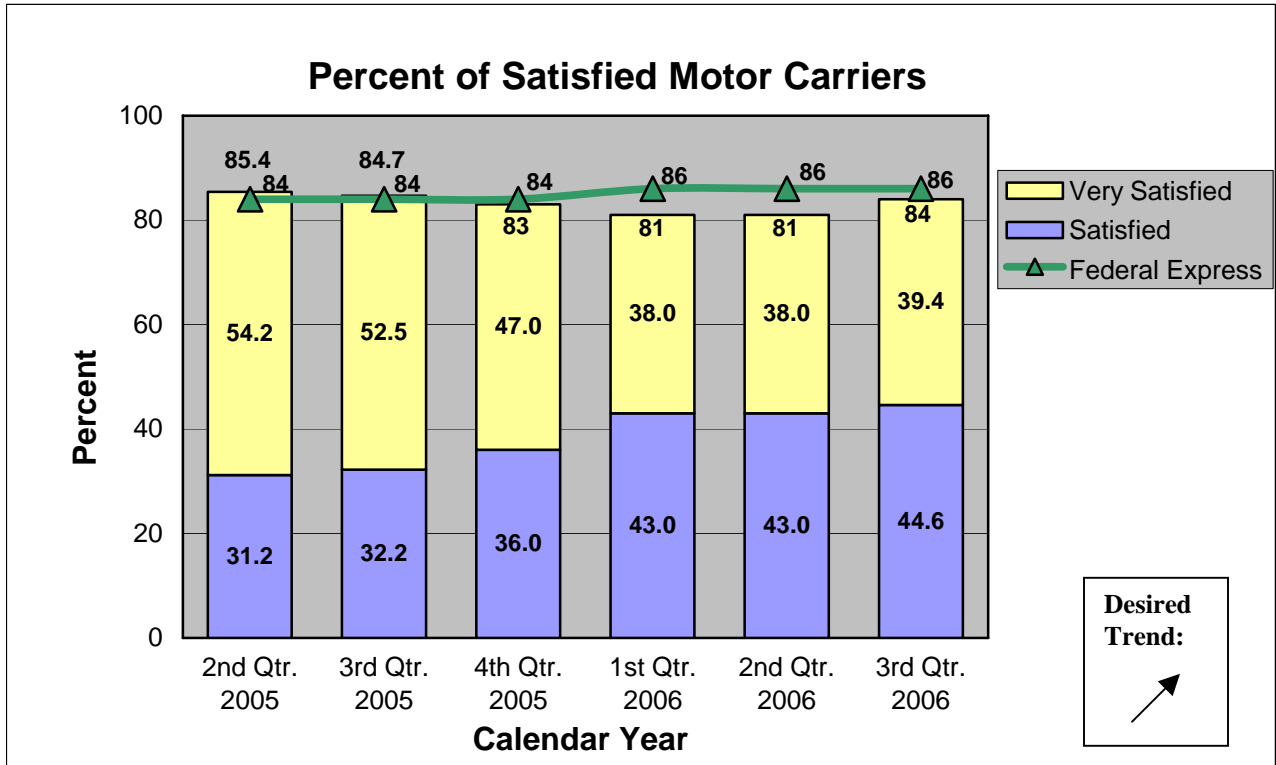
Federal Express is the benchmark for this measure that also mirrors measure 5a, Percent of Overall Customer Satisfaction. The American Customer Satisfaction Index reports that Federal Express has the highest customer satisfaction rate – 86 percent – out of 200 companies and government agencies they score.

**Improvement Status:**

Overall MCS customer satisfaction levels increased by three percent to 84 percent in the third quarter of 2006 with 39.4 percent of customers indicating they are "very satisfied." All MCS programs earned higher satisfaction rates in the third quarter.

To improve its service, MCS:

- Continued hands-on training for all online programs,
- Provided customers with up-to-date information regarding the programs by Web site and mail,
- Continued assigning agents to cross-program teams, reducing the number of people a customer must contact to complete their transactions,
- Established the "Go To Team" a group of employees who propose and evaluate workplace efficiencies and process improvements,
- Worked with MTI to improve the MCS customer satisfaction survey, and
- Used customer satisfaction survey results to identify opportunities to improve performance.



## Efficient Movement of Goods

### *Customer satisfaction with timeliness of Motor Carrier Services response*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer

**Measurement Driver:** Mary Jo Pointer, Motor Carrier Manager

**Purpose of the Measure:**

This measure tracks motor carriers' satisfaction with MoDOT Motor Carrier Services' speed of response.

**Measurement and Data Collection:**

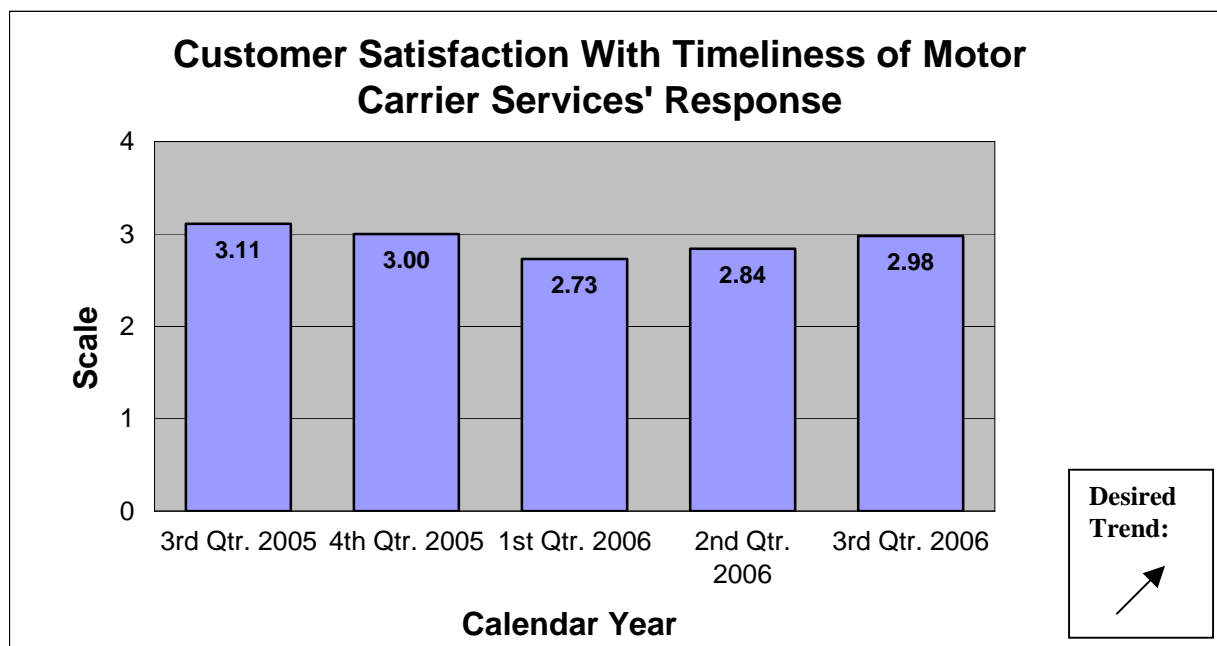
Each quarter, the Missouri Transportation Institute surveys a pool of motor carriers who contacted MCS in the previous three months. These customers are asked to evaluate their satisfaction with 12 customer service factors across the four MCS program divisions, International Registration Plan/International Fuel Tax Agreement, Safety and Compliance, Over-dimension/Overweight Permitting and Operating Authority. "Timely Response" is one factor carriers evaluate with a four-point scale ranging from 4=Very Satisfied to 1=Very Dissatisfied.

**Improvement Status:**

Customers' satisfaction with MCS' timely response rebounded following two quarters of decrease. Overall scores decreased at the end of 2005 because carriers were dissatisfied with MCS' OD/OW permit response. In early 2006, scores slightly improved though scores for the IFTA/IRP and Operating Authority sections fell. In the third quarter 2006, all MCS programs earned higher satisfaction ratings.

To improve response time, MCS:

- Adjusted the hours employees work in the division's Jefferson City office before the doors are open to the public and after they close,
- Delivered large carriers' renewal documents on updatable, searchable compact discs, reducing customer processing time,
- Continued to provide training on the MoDOT Carrier Express system at customers' request,
- Delivered MCS-specific e-Updates messages to customers.



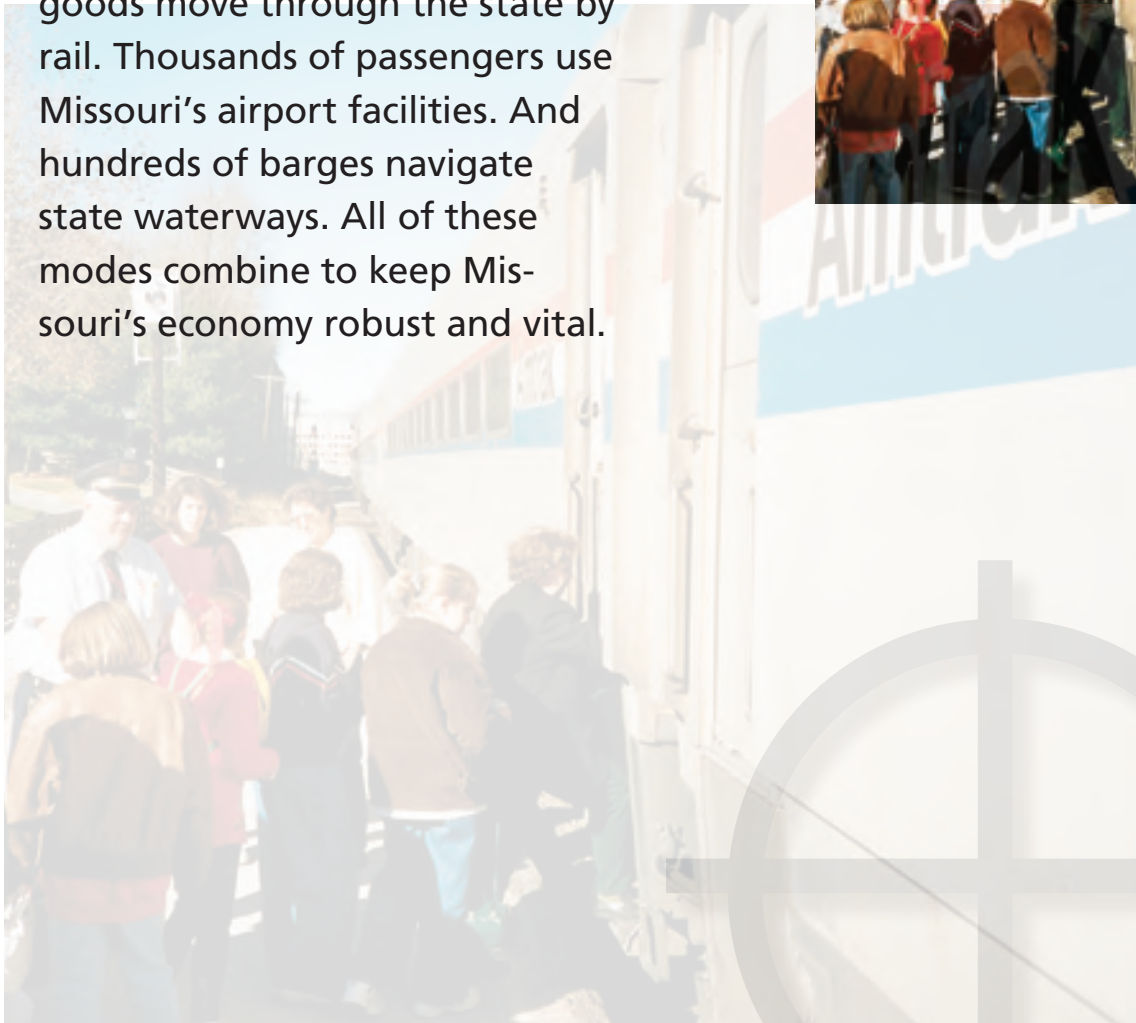


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# Easily Accessible Modal Choices

*Tangible Result Driver – Brian Weiler,  
Multimodal Operations Director*

MoDOT has an active role in all modes of transportation, including rail, air, water, and transit. Transportation is more than highways and bridges. Every day millions of tons of goods move through the state by rail. Thousands of passengers use Missouri's airport facilities. And hundreds of barges navigate state waterways. All of these modes combine to keep Missouri's economy robust and vital.



## Easily Accessible Modal Choices

### *Number of airline passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

This measure tracks the number of passengers boarding airplanes at Missouri's commercial airports. It helps determine the viability of Missouri's commercial airline industry. This number is also used by the Federal Aviation Administration to help determine airports' capital improvement funding levels.

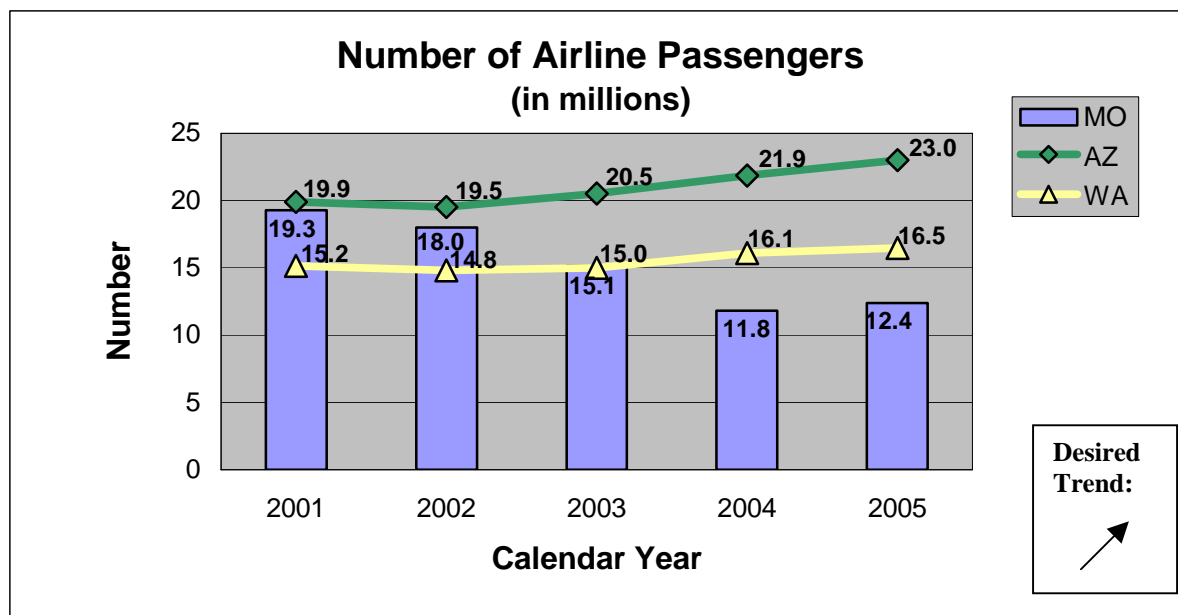
**Measurement and Data Collection:**

The data is collected annually from FAA. Comparison data has been collected from the same source for the states of Arizona and Washington. These two states were selected based on similar populations in 2004. The annual passenger boardings' data provided by the FAA is normally published in October for the preceding year. Airline passengers are defined as passengers boarding airplanes.

**Improvement Status:**

Data is tracked on an annual basis. The significant decrease in flights by American Airlines at St. Louis Lambert International Airport (approximate reduction of 200 flights per day in November 2003) and the effects of 9/11, in part, have contributed to the decrease in airline passengers over the last four years. It appears, based on the sample data collected below, that nationally airline passenger boardings are beginning to recover from the effects of 9/11. The reduction in flights by American at Lambert Airport has negatively impacted growth in passenger boardings in St. Louis and in Missouri as a whole. Also, increases in airline operational costs and airline bankruptcy filings pose challenges to communities seeking enhanced air carrier service. Airline passengers have shown an increase for Missouri from 2004 to 2005. On a statewide basis, this was an approximate 4.8 percent increase.

MoDOT is participating with the FAA, Illinois Department of Transportation and East-West Gateway Council of Governments in a St. Louis Area System Plan study. The study will assess the region's aviation assets and develop a regional approach for the future development of the assets.



## Easily Accessible Modal Choices

### *Number of rail passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Rod Massman, Administrator of Railroads

**Purpose of the Measure:**

This measure tracks the number of people using the Amtrak train service in Missouri. This includes those taking a train trip in Missouri at any point within the state, which counts those riding on the state-supported passenger rail trains between Kansas City and St. Louis; the national trains that run through the state; and the St. Louis to Chicago trains, which are partly supported by the state of Illinois.

For comparison purposes, the state of Washington's train data is shown based on the state's similar size, population and the fact that Washington has both national- and state-supported trains. Washington's "Cascades" train service is a model for the nation because the state invests millions of dollars in both infrastructure and operations every year.

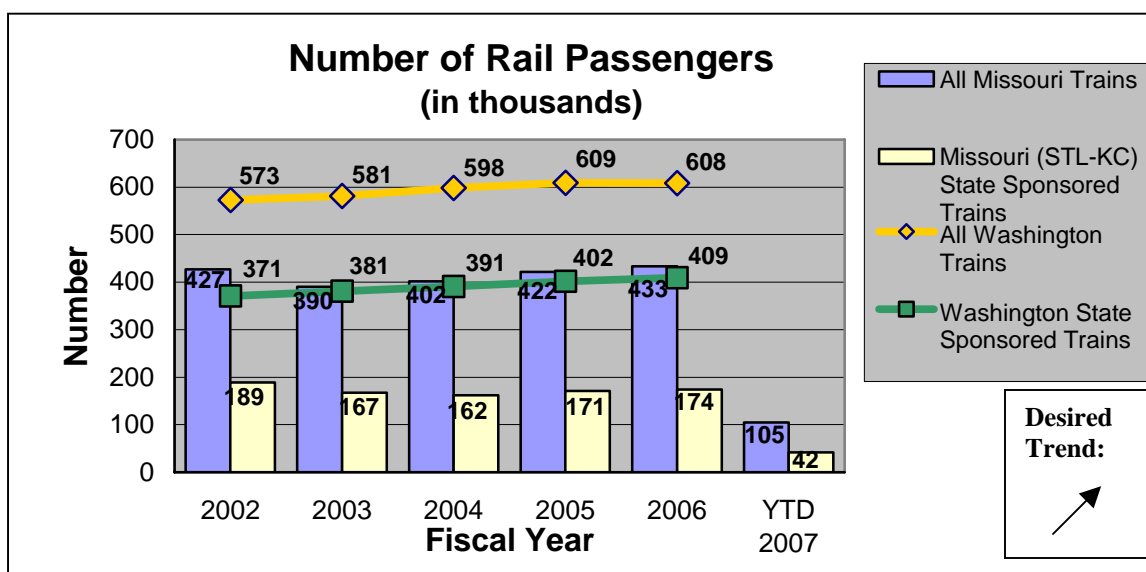
**Measurement and Data Collection:**

Amtrak provides the number of passengers per train in Missouri on a monthly basis. MoDOT's Multimodal Operations Division's Railroad Section then tabulates these numbers.

**Improvement Status:**

State fiscal year 2006 is the second year in a row that total ridership numbers on the St. Louis-to-Kansas City route increased. State FY 2006 shows an increase of about two percent over the previous year. The rising price of gas and increased congestion may explain the increase from an external viewpoint. Internally, stepped-up publicity efforts by MoDOT including new roadside signs, news releases, a wide-ranging distribution of train schedules, a focus on college students and a variety of other new publicity efforts, including combining appearances at rail safety fairs with Amtrak information and ticket giveaways, may account for some increases.

Challenges include a major track work program undertaken by Union Pacific that began in April 2006 and will end in November 2006 on the St. Louis-to-Kansas City route, which has affected on-time performance. The use of buses instead of trains in certain situations has also affected ridership. The addition of two more daily trains from St. Louis to Chicago and an additional train from Quincy, IL, to Chicago beginning in October 2006, along with the fact that MoDOT is still exploring the expansion of Amtrak service to Springfield, have increased the public discussion of Amtrak. This public discussion brings more awareness to Amtrak trains in Missouri and could positively influence ridership. Washington State data will be available for the January 2007 Tracker.



## Easily Accessible Modal Choices

### *Number of transit passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

**Purpose of the Measure:**

This measure gauges the use of public transit mobility services in Missouri. It also provides a historical perspective and trend of public transit service use in Missouri.

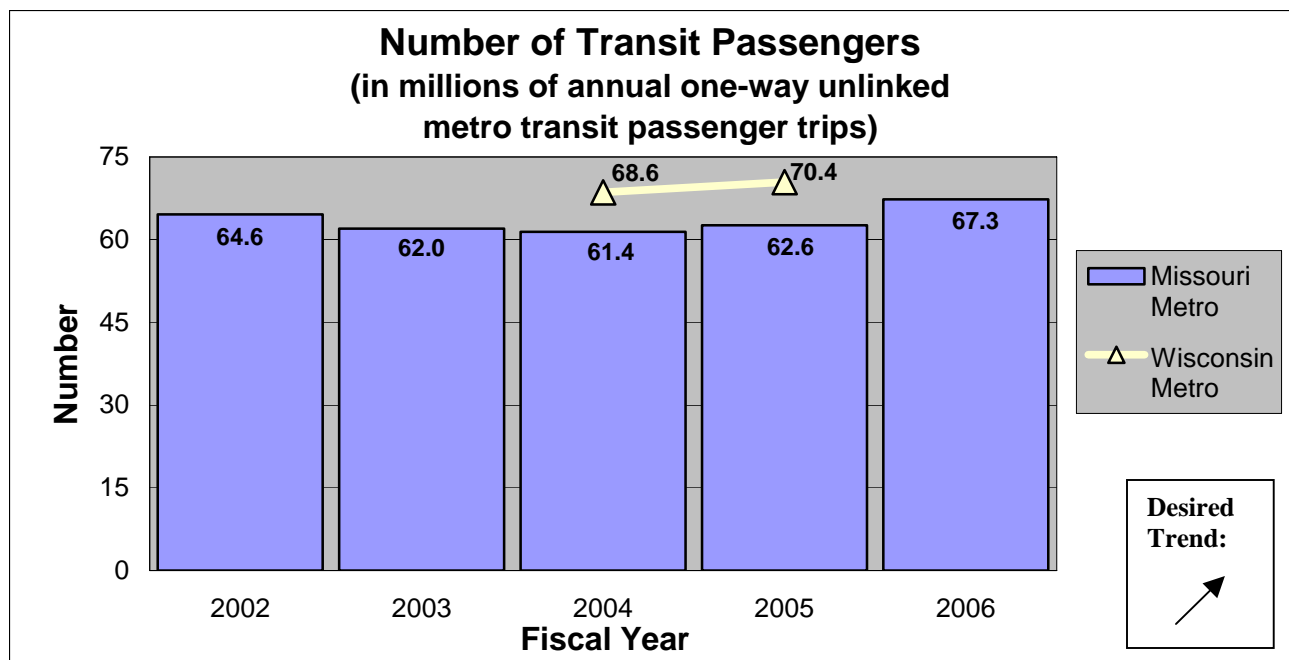
**Measurement and Data Collection:**

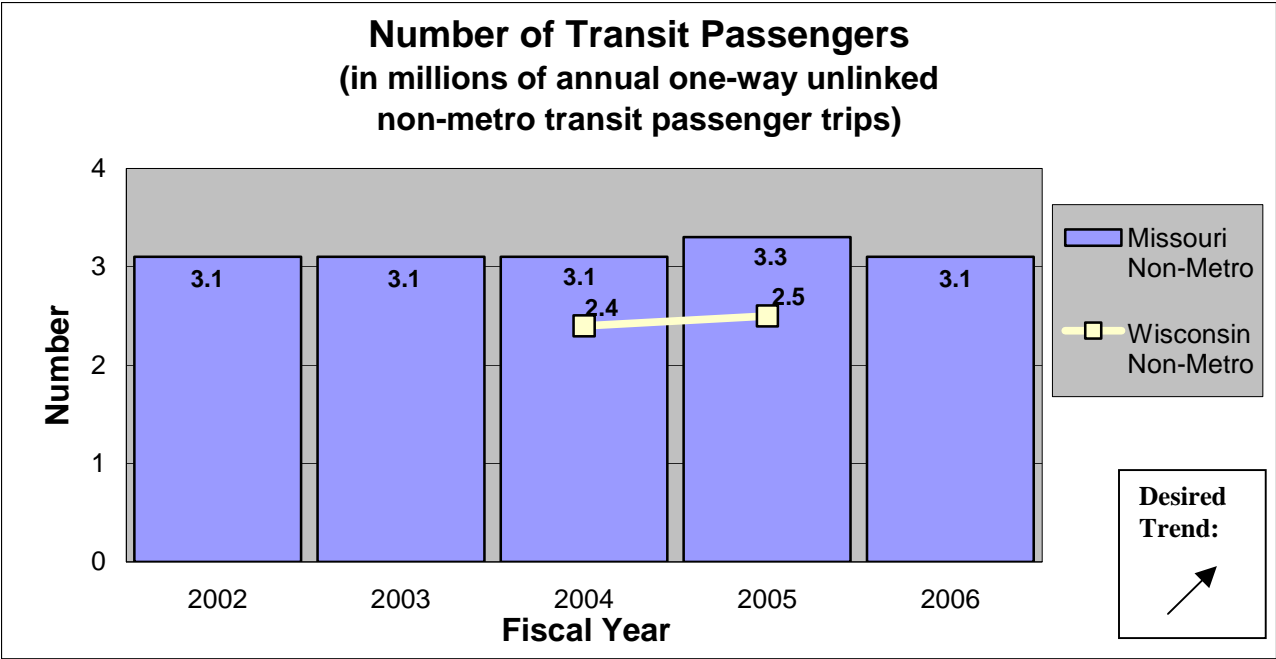
The total number of transit passengers is measured by the annual total of one-way unlinked transit trips taken by passengers on public transit vehicles. Data is obtained from urban and rural providers of general public transit services. The 2004-2005 measures are benchmarked to Wisconsin, which has a comparable total statewide population. Wisconsin's 2006 fiscal year data is by the calendar year, so its 2006 data is not yet available.

**Improvement Status:**

Metro ridership statewide in 2006 increased by 4.7 million trips compared to 2005 with more annual transit trips taken by riders in all of Missouri's urban transit systems, except St. Joseph. Kansas City began its MAX bus rapid transit service during this period while higher gasoline prices convinced some people to make more of their trips by transit. Non-metro (rural) ridership decreased by 6 percent from 3.3 million trips in 2005 to 3.1 million trips in 2006. Most of the loss in rural transit use is associated with cuts in funding and schedules for social service transportation programs.

Missouri compared favorably to Wisconsin's rural transit ridership in 2004 and 2005. Wisconsin's transit ridership statewide increased in 2005, largely due to greater transit use in Milwaukee. The Missouri Legislature for 2007 appropriated an additional \$250,000 for non-metro transit, as well as an additional \$250,000 to Springfield, to partially offset a decrease of federal transit operating assistance. MoDOT continues to work with transit providers to develop a second Missouri Rural Transit Marketing Campaign while ads run in local media from the first award-winning campaign.





## Easily Accessible Modal Choices

### *Number of passengers and vehicles transported by ferryboat*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Sherrie Martin, Waterways Program Manager

**Purpose of the Measure:**

This measure tracks information regarding use of ferryboat services in Missouri.

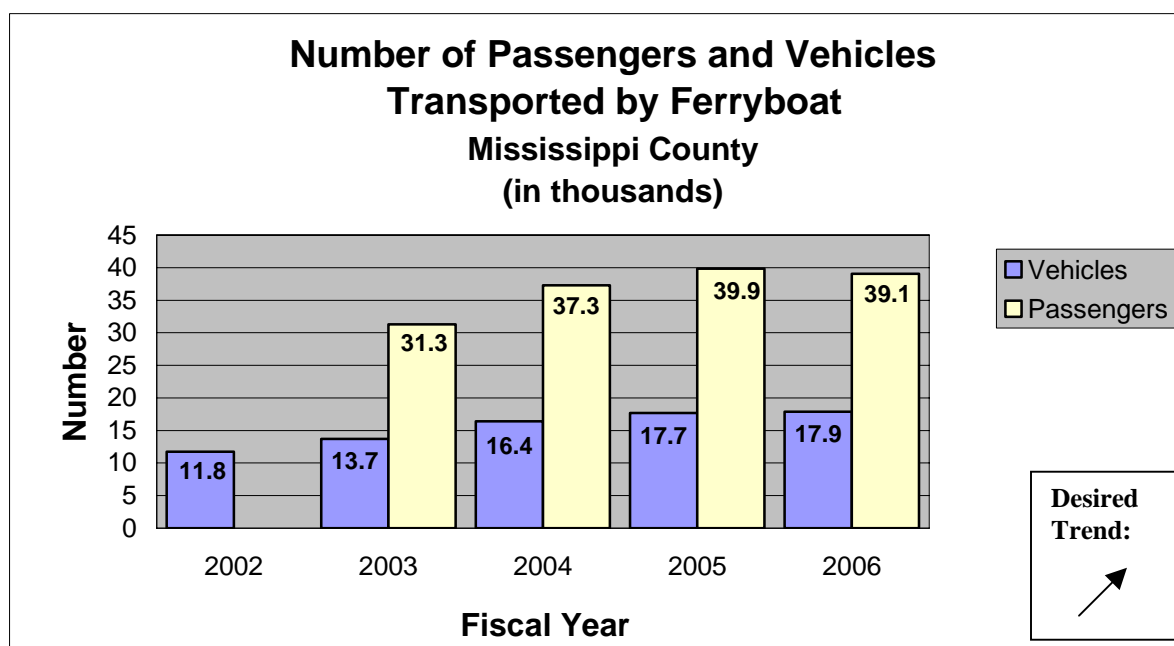
**Measurement and Data Collection:**

Missouri's two ferry services submit a monthly report that includes the information shown in the graph below, the cost for providing the service and for any service disruption.

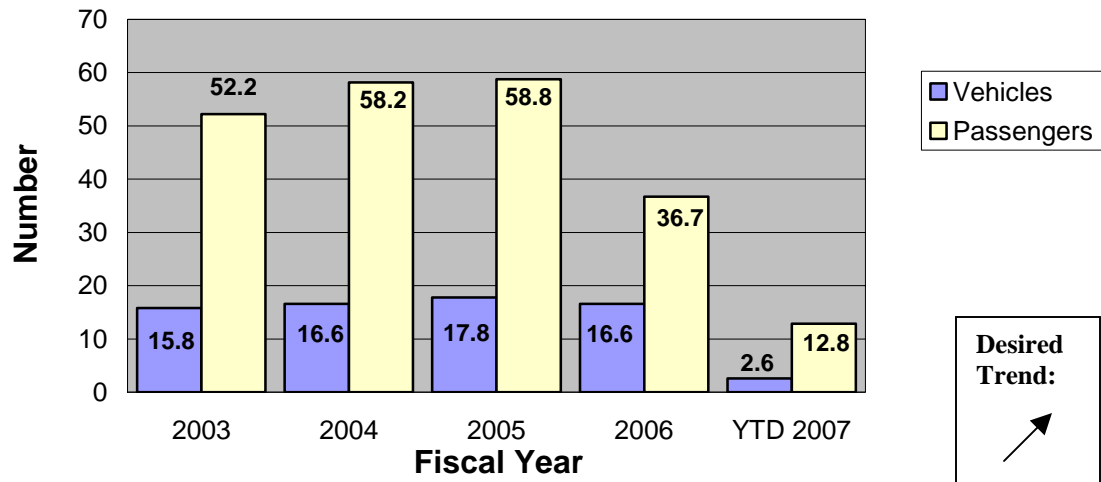
**Improvement Status:**

September 2006 statistics are not available for the Mississippi County ferryboat, but July and August data indicates a three percent decrease in traffic from the same period last year. The New Bourbon ferryboat has seen a drastic decrease of 55 percent in vehicle traffic over last year. For the first quarter of fiscal year 2007, the ferry carried 2,559 vehicles compared to 5,579 during the same period in 2006 and 12,839 passengers compared to 14,350 in 2006.

Both operators attribute this decrease to several factors. Increased fuel costs have decreased tourist traffic. Both boats have experienced days of interrupted service due to high/low water events. Both services have had to raise rates to help defray increases in cost to deliver service, due mainly to high fuel prices.



**Number of Passengers and Vehicles  
Transported by Ferryboat  
New Bourbon Regional  
(in thousands)**



## Easily Accessible Modal Choices

### *Number of days the Missouri River is navigable*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Sherrie Martin, Waterways Program Manager

**Purpose of the Measure:**

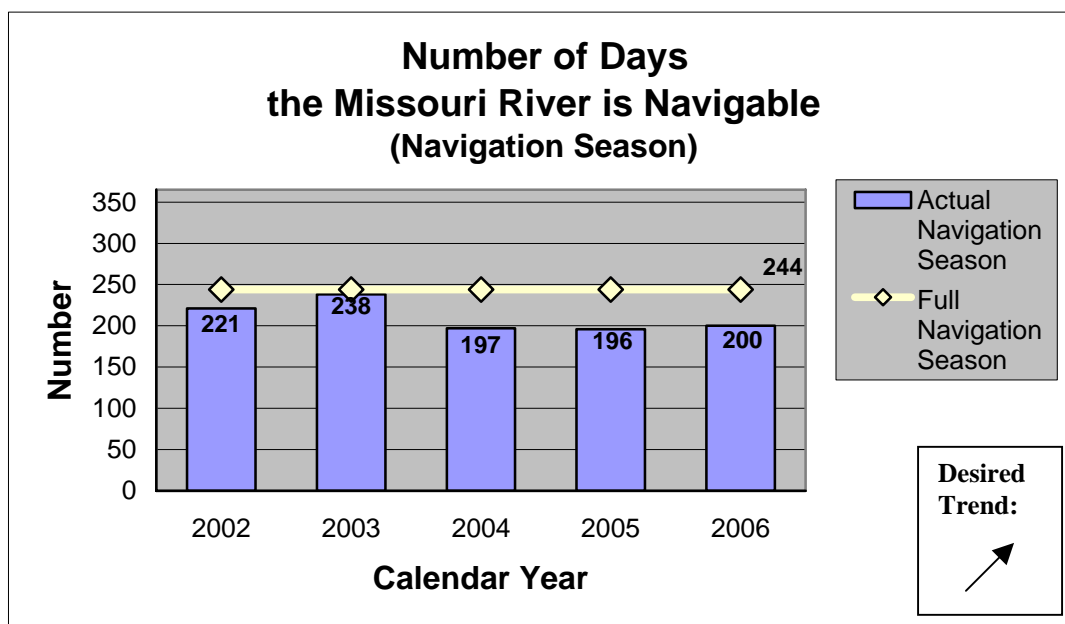
This measure provides historical data regarding the use of the inland waterways navigation system. The Mississippi River typically is open to navigation year round with interruptions to navigation only for extreme high/low water events and winter conditions on the Upper Mississippi. The Missouri River has a controlled navigation season.

**Measurement and Data Collection:**

The U.S. Army Corps of Engineers publishes an Annual Operating Plan for the Missouri River and bases the end of navigation season on pool storage levels as of July 1 each year.

**Improvement Status:**

The 2006 navigation season began April 1 and ended Oct. 16 with releases that supported minimum navigation through most of the season. There was a 44-day shortening of the navigation season due to the low storage level as of July 1. Full navigation season would have ended Dec. 1, 2006. The Corps of Engineers has released the 2007 Draft Annual Operating Plan. The plan again uses trigger dates and storage levels to determine the season's start date, closing date and release volumes.





## Easily Accessible Modal Choices

### *Number of business-capable airports*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

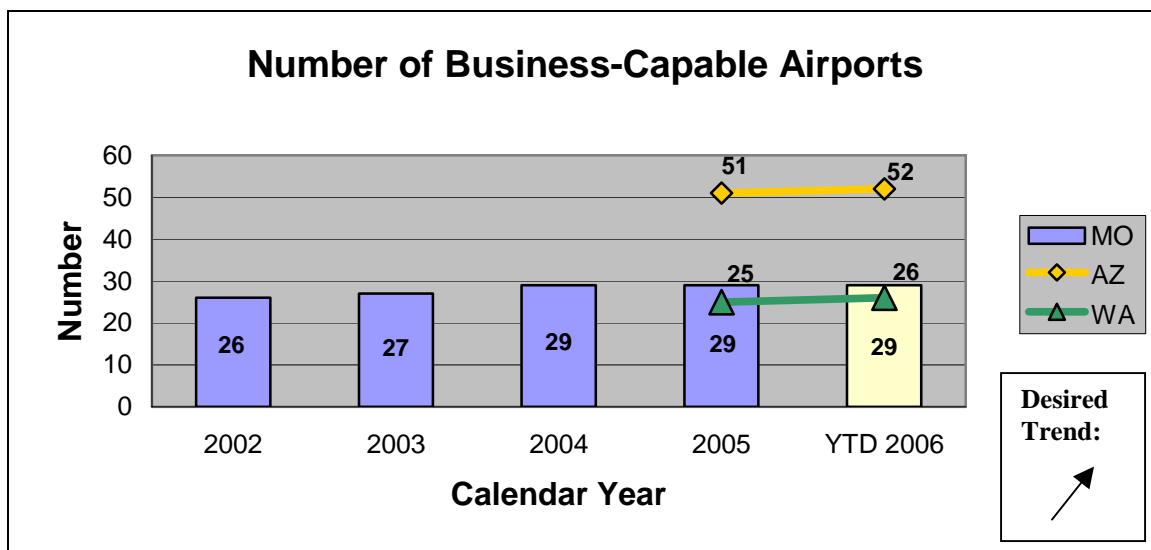
This measure tracks the number of airports capable of handling business aircraft. Local communities and economic development agencies can use airports to assist in increasing a community's economic viability for business retention and development.

**Measurement and Data Collection:**

The graph shows the number of business-capable airports. A business-capable airport is defined as accommodating business- or corporate-type aircraft with a runway length of 5,000 feet or more. Since 2002, three additional airports in Missouri have either extended or constructed runways of 5,000 feet or greater. This increase allows additional communities and an increased population greater exposure to business-capable airports. Comparison data for 2005 and 2006 is being collected from the states of Washington and Arizona. These states have similar population totals as Missouri. Washington is similar in geographic area with Arizona being approximately 65 percent larger than Missouri. Data is collected annually by monitoring airports' developments and Federal Aviation Administration records.

**Improvement Status:**

The State Airport System Plan Update and the annual development of MoDOT's Statewide Transportation Improvement Program identify airports that meet the demand criteria and would support the development of a 5,000-foot runway. The State Aviation Trust Fund, which is used for maintenance and capital improvement projects at airports, increased from approximately \$3 million in calendar year 2004 to \$6 million in calendar year 2006. An airport survey and information campaign conducted by MoDOT, and the Missouri Department of Revenue's review of the trust fund, led to obtaining these additional funds.



## Easily Accessible Modal Choices

### *Number of daily scheduled airline flights*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

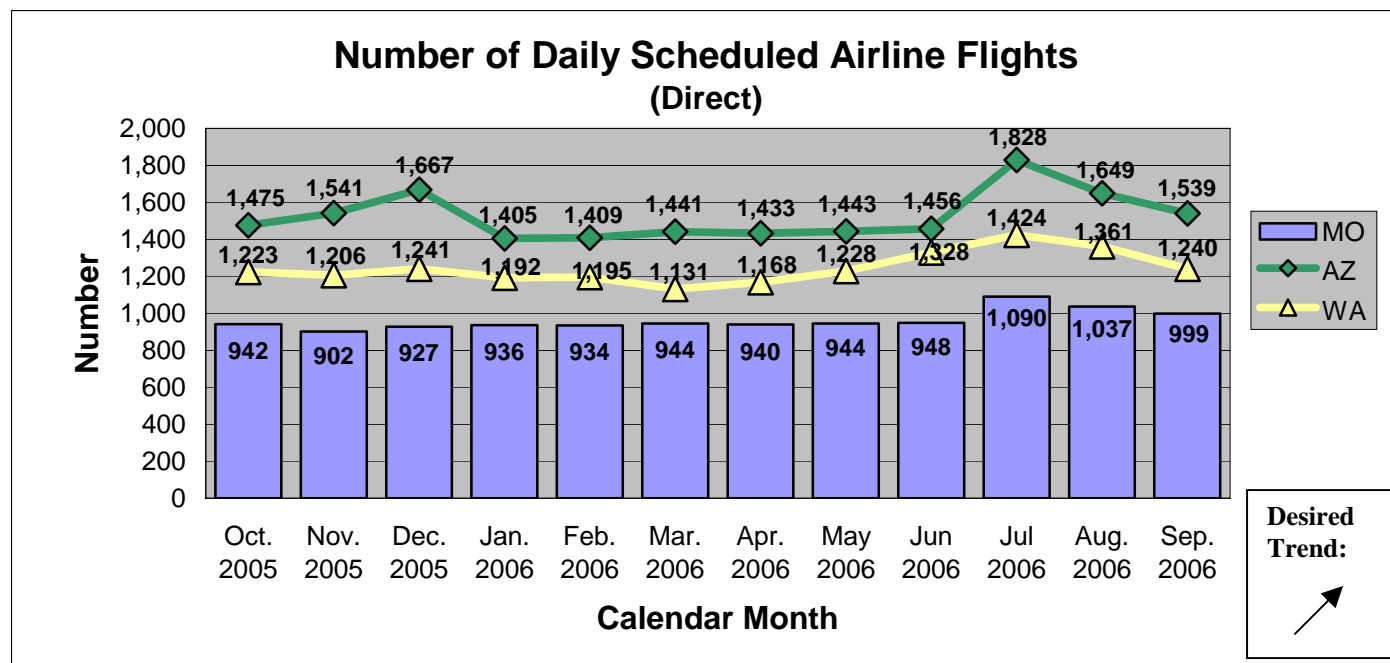
This measure tracks the number of airline flights. The data assists in determining options available to the traveling public. It provides an indication of the airline industry's economic stability in Missouri.

**Measurement and Data Collection:**

A direct scheduled airline flight is a take-off by a scheduled commercial air carrier. A direct flight has the same flight number and is flying to one or more destinations. Data is being collected from seven airports in the state that presently accommodate scheduled airline flights. These airports are: St. Louis Lambert International, Kansas City International, Springfield-Branson, Joplin, Columbia, Waynesville and Cape Girardeau. Comparison data has been collected for the commercial airports in Arizona and Washington. These two states were selected based on similar populations in 2004. The data is collected from the Official Airline Guide.

**Improvement Status:**

The flights are tracked on a monthly basis with a daily snapshot collected for each month. In Missouri, the number of flights has remained relatively consistent from October 2005 to June 2006 with an increase in the summer of 2006. MoDOT is participating with the Federal Aviation Administration, Illinois Department of Transportation and East-West Gateway Council of Governments in a St. Louis Area Aviation System Plan study. The study will assess the region's aviation assets and develop a regional approach for the future development of the assets.



## Easily Accessible Modal Choices

### *Average number of days per week rural transit service is available*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

**Purpose of the Measure:**

This measure identifies the average existing public transit service in rural Missouri by indicating the availability of rural mobility services for employment, medical appointments and necessary shopping.

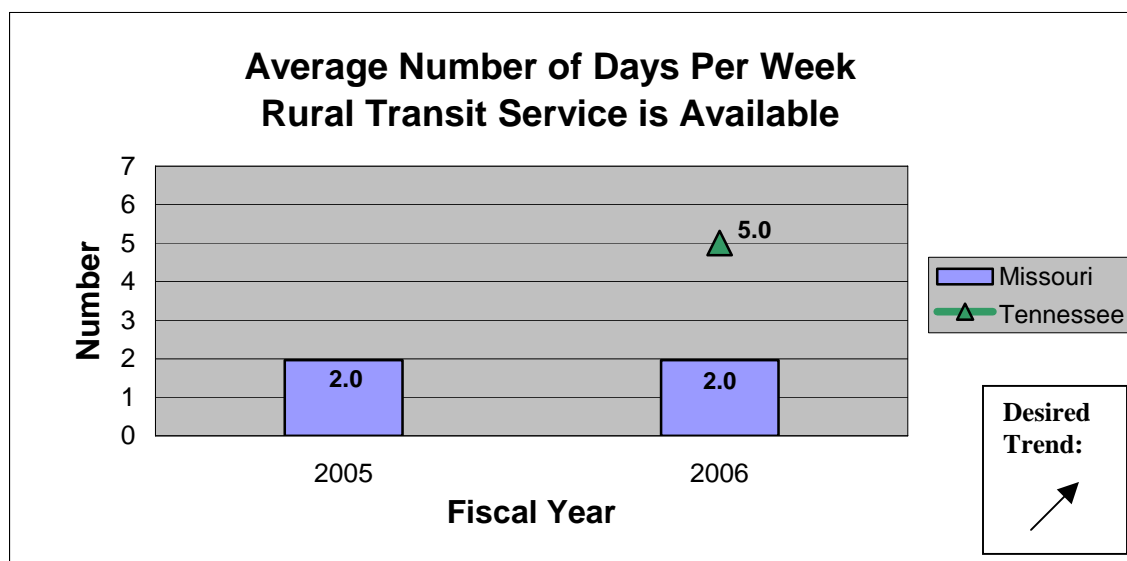
**Measurement and Data Collection:**

Reviewing published transit service schedules for each rural Missouri county and averaging those daily frequencies within a week's schedule for available countywide transit service calculates the statewide average number of days per week rural transit service is available. Rural transit agencies operate on an annual budget and customarily make transit service changes with the start of a new budget year. The measure is benchmarked to Tennessee, which has a comparable statewide population and some amount of transit service in every rural county as does Missouri.

**Improvement Status:**

Rural transit service at a statewide average of two days per week is not sufficient for its riders to support full-time employment. The outlook for 2007 suggests an opportunity for growth in rural transit service based on a 67 percent increase of federal rural transit funds authorized to Missouri through SAFETEA-LU, which is the federal transportation funding legislation. For 2006, Tennessee deployed more rural transit service with five-day-a-week service, based on available seating. Tennessee directs more state funding to rural public transportation (\$7,000,000 vs. \$800,000 in Missouri). Tennessee's transit providers also use pure demand-response dispatching compared to designated daily routes as used by OATS and other Missouri providers. However in 2004, Missouri's rural transit providers together delivered 3.2 million trips compared to 1.4 million rural transit trips provided in Tennessee.

MoDOT recently worked with local transit systems to produce a speaker's video to help transit managers make a persuasive case for more local funding for rural transit service. MoDOT is also procuring rural transit intelligent transportation system design services to help bring technology improvements to rural public transit to increase service through scheduling efficiencies.



## Easily Accessible Modal Choices

### *Number of intercity bus stops*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

**Purpose of the Measure:**

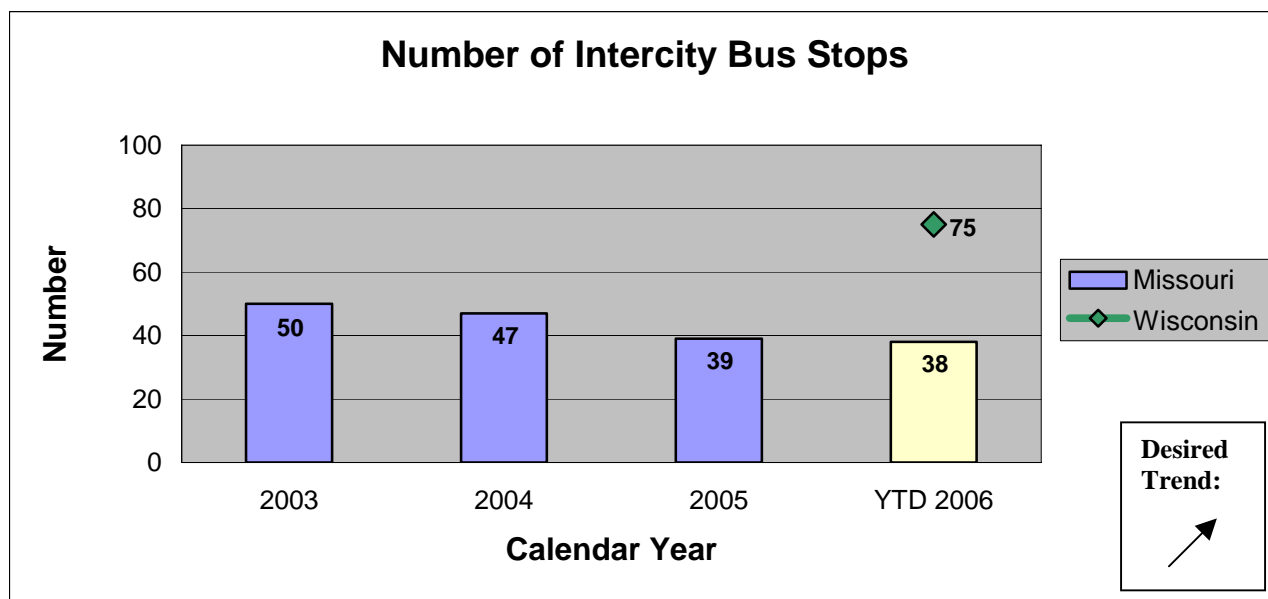
This measure tracks the number of intercity bus stops. Intercity bus stops represent access points to intercity bus services provided by Greyhound, Jefferson Lines and Trailways. More stops among Missouri's 114 counties means greater access. Fewer stops create a barrier by requiring greater traveling distances in order to board an intercity bus.

**Measurement and Data Collection:**

Data on the number and location of intercity bus stops is obtained annually from the national and regional intercity bus carriers. The year-to-date 2006 measure is benchmarked to Wisconsin, which has a comparable total statewide population.

**Improvement Status:**

The number of Missouri's intercity bus stops declined in 2005 and in 2006 due to the changes in Greyhound service. MoDOT analyzed counts and surveys from coach riders to better determine the needs for intercity bus service in Missouri. MoDOT is working with Jefferson Lines to procure two buses to operate more service in Missouri. Jefferson Lines in May 2006 added a route with five stops to serve the abandoned Greyhound routes on the Missouri 13/U.S. Route 65 corridor to restore intercity bus service to Clinton, Osceola, Humansville, Bolivar and Branson.



## Easily Accessible Modal Choices

### *Percent of customers satisfied with transportation options*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Matt Cowell, Railroad Operations Manager

**Purpose of the Measure:**

This measure provides information about the public's perception of MoDOT's performance in providing transportation options.

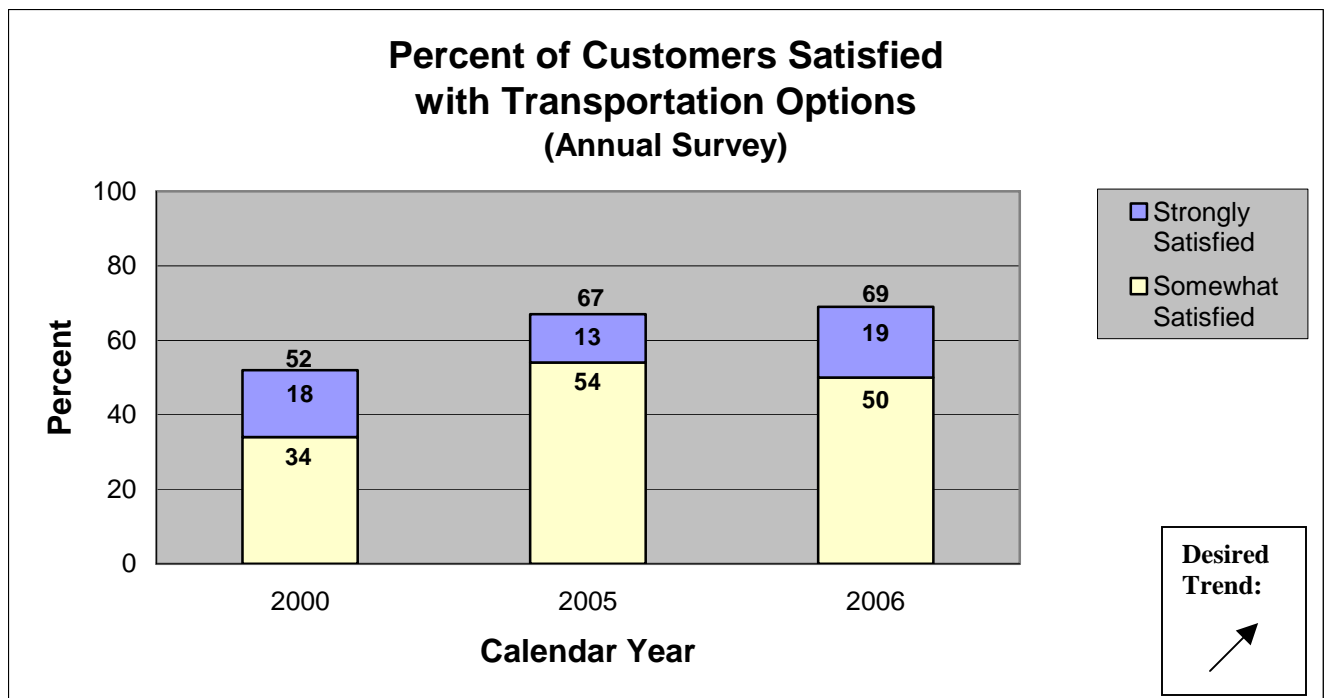
**Measurement and Data Collection:**

Data was collected through an annual statewide customer satisfaction telephone survey. The survey included interviews with 3,500 Missouri adults with an overall margin of error of +/- three percent.

**Improvement Status:**

For the 2006 survey, over 69 percent of the survey participants sampled stated they are strongly satisfied or somewhat satisfied with transportation options in Missouri. Conversely, 24 percent of the sample is somewhat dissatisfied or strongly dissatisfied with the transportation options available. The remaining seven percent sampled were unsure about transportation options. When compared to the 2005 data provided from the statewide customer survey, 67 percent of the sample was somewhat satisfied or was strongly satisfied with transportation options while 28 percent responded as somewhat dissatisfied or strongly dissatisfied, and five percent were unsure with the options available to those who do not or cannot drive. The desired trend has increased by two percent from the 2005 survey.

MoDOT continues to work at improving service and awareness of transportation options with the 8.2-mile expansion of MetroLink in the St. Louis area. A feasibility study of running an Amtrak train from St. Louis to Springfield will be completed in February 2007. The port authority needs assessment was completed in March 2006, and this data will be used to promote the use of waterways and seek an increase in funding for the next legislative session beginning in January 2007.



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# Customer Involvement in Transportation Decision-Making

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT seeks out and welcomes any idea that increases its options, because the department doesn't have all the answers. The department creates and preserves a transportation decision-making process that is collaborative and transparent, involving its customers in the determination of needs right through to the development, design and delivery of projects.



## Customer Involvement in Transportation Decision-Making

### *Number of customers who attend transportation-related meetings*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

**Purpose of the Measure:**

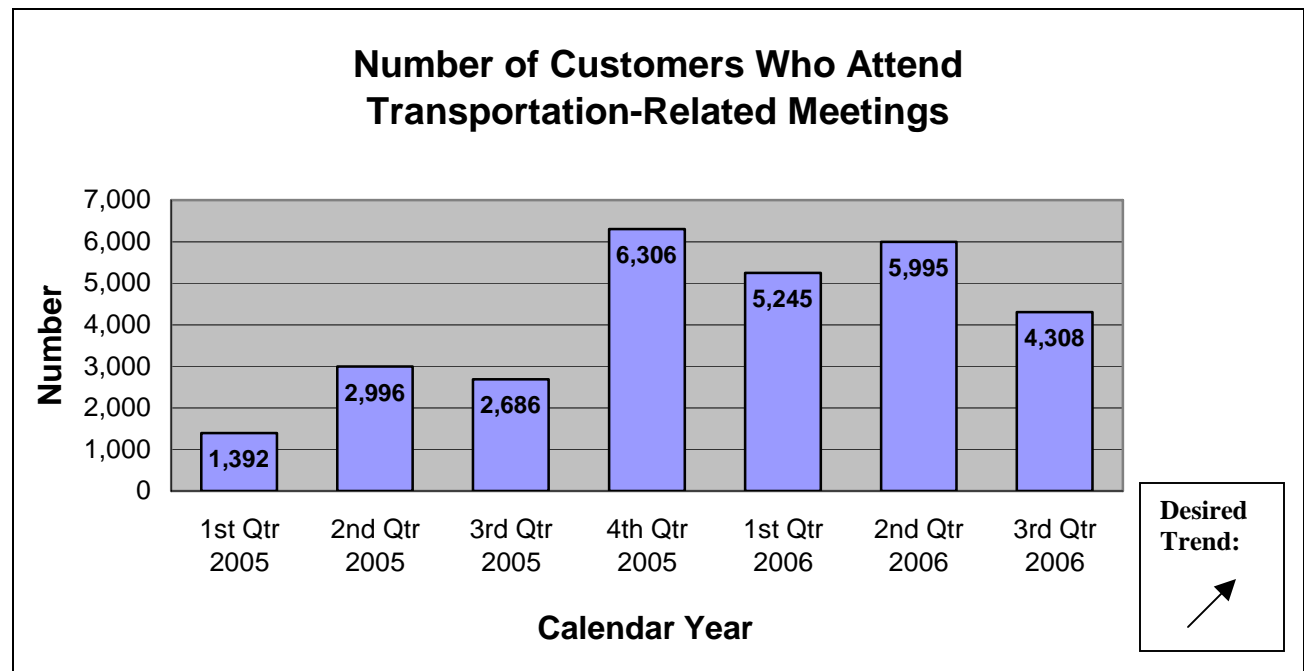
This measure gauges MoDOT's public involvement success – both in terms of public meetings and hearings that are held to make collaborative decisions with the general public, communities, elected officials, stakeholders, and in terms of public informational events scheduled by MoDOT to keep its customers apprised of project status and potential impacts that could be experienced.

**Measurement and Data Collection:**

Attendance is determined by analyzing sign-in sheets used at public meetings or by head counts conducted by MoDOT staff.

**Improvement Status:**

Attendance at public meetings/hearings hosted by MoDOT during the third quarter of 2006 was down 28 percent – not surprising considering that the summer vacation season is typically avoided when scheduling these events. Some 157 meetings were held in July-August-September compared to 307 meetings held the previous quarter. Still, attendance was up 60 percent compared to the same quarter in 2005. So far in 2006, 15,548 persons have attended MoDOT public meetings/hearings compared to 13,380 for all of 2005.





## Customer Involvement in Transportation Decision-Making

### *Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

**Purpose of the Measure:**

This measure tracks MoDOT's responses to its customers. MoDOT routinely asks people who attend public meetings/hearings to submit comments that will be examined by the project team and will become part of the project's official record. It is important that people who avail themselves of this opportunity know that their comments are taken seriously.

**Measurement and Data Collection:**

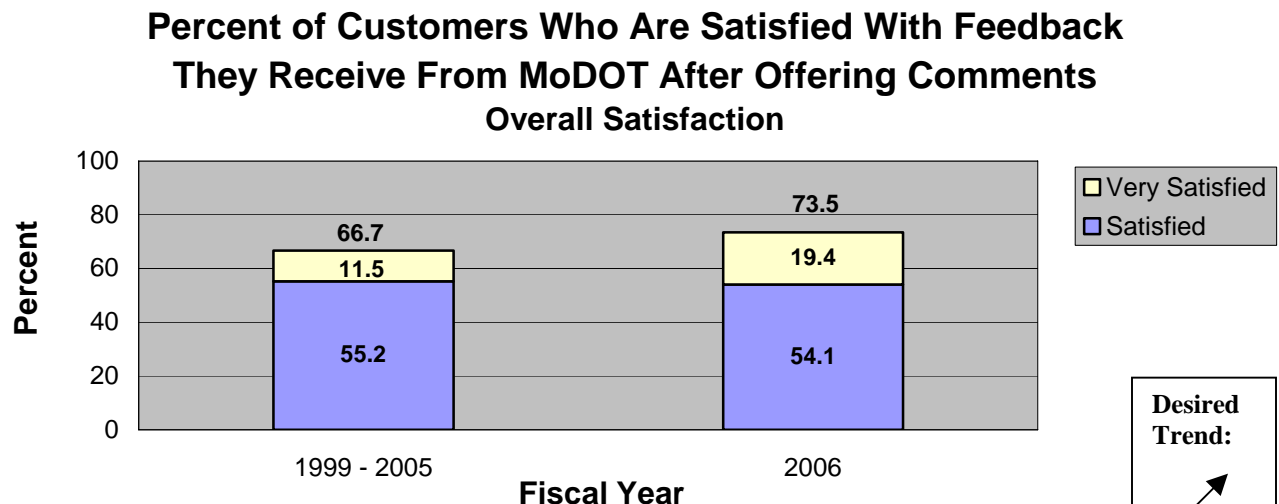
MoDOT Design, Community Relations and Organizational Results developed a survey in cooperation with the Missouri Transportation Institute for persons who attend project-specific meetings and hearings. The initial survey was sent to more than 4,500 persons who attended meetings in a five-year period. A survey process continues, with contacts made each time a project reaches the official public hearing milestone. Data is analyzed twice each year.

**Improvement Status:**

New data will be available in January 2007. During Fiscal Year 2006, people who attended public hearings for 33 projects in nine MoDOT districts were surveyed. Nearly three-fourths of the respondents (73.6 percent) were satisfied with how their questions and comments were handled by MoDOT – up from 66.7 percent a year ago. Also, the number of very unsatisfied customers decreased from 13.2 to 10.5 percent and those who were unsatisfied dropped from 20.1 to 15.9 percent.

Other survey questions showed dramatic improvement: 84.9 percent said they clearly understood the information and explanations given by MoDOT – up from 66.3 percent; and 73.8 percent said the decision-making process was open, transparent and fair – a jump from 58.1 percent.

Quarterly discussions and reviews of Tracker measures with CR Managers across the state continue to help enhance performance in the area of public involvement and proactive communication with MoDOT customers.



## Customer Involvement in Transportation Decision-Making

### *Percent of customers who feel MoDOT includes them in transportation decision-making process*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning Outreach Coordinator

**Purpose of the Measure:**

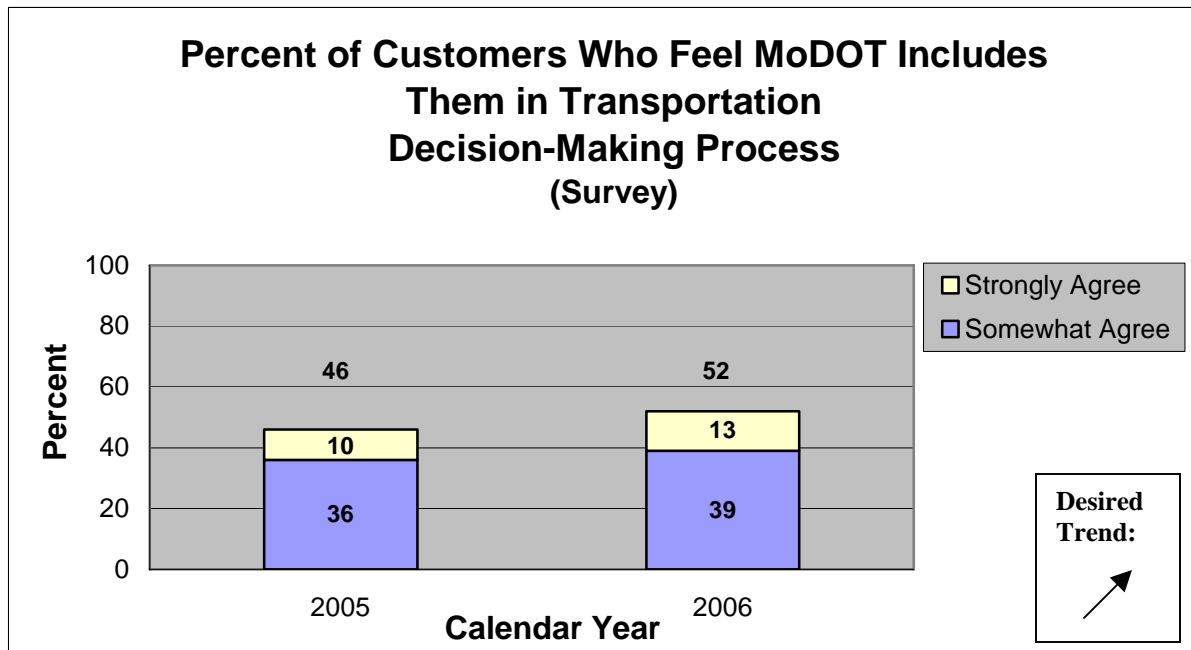
This data assists in determining the effectiveness of MoDOT's project planning outreach efforts.

**Measurement and Data Collection:**

Data for this measure is collected annually. The most recent data, gathered from a statewide random telephone survey of 3,500 Missourians, was collected in May 2006. Survey data originally collected for MoDOT's long-range planning initiative called Missouri Advance Planning in May 2005 provided a baseline for comparison of the 2006 survey data. One focus of the MAP initiative was to improve the public's involvement in transportation decision-making. To accomplish this, six citizen groups, called Regional Working Groups, were created, representing economic development leaders, educators, farmers, bankers, community leaders and local elected officials. RWG members helped MoDOT analyze transportation policies and develop new ideas in an effort to plan for Missouri's transportation future.

**Improvement Status:**

This year's data is based on a May 2006 customer telephone survey. MoDOT learned that 52 percent of the survey sample feels MoDOT takes into consideration their concerns and needs when developing transportation decisions, up from 46 percent in 2005. Dissatisfaction with MoDOT has dropped from 44 percent in 2005 to 37 percent in 2006. MoDOT anticipates that continuously improving community outreach and external communication efforts will result in greater public involvement in transportation decision-making.



## Customer Involvement in Transportation Decision-Making

### *Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning Outreach Coordinator

**Purpose of the Measure:**

This measures MoDOT's efforts of including planning partners (members of metropolitan planning organizations and regional planning commissions) in transportation-related decision-making. The percent of positive feedback through the surveys demonstrates planning partners' involvement.

**Measurement and Data Collection:**

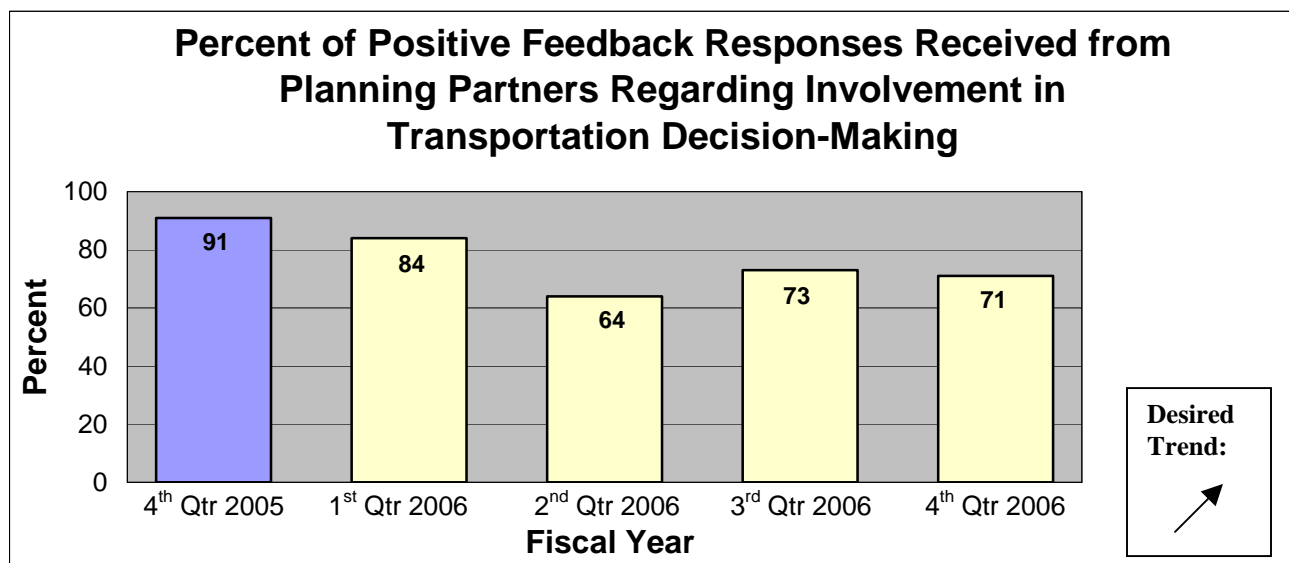
MoDOT Transportation Planning works with Missouri Transportation Institute to administer a survey measuring planning partners' involvement in the transportation decision-making process. The survey answers are based on the following scale: strongly disagree, disagree, agree and strongly agree. This measure is changing to an annual measure. The next survey will be late spring/early summer 2007. Previously, survey data was collected from planning partners following each quarter of MoDOT's planning meetings or work sessions.

**Improvement Status:**

Beginning in fiscal year 2007, the quarterly survey will become an annual survey focusing more on feedback regarding overall involvement of planning partners in the planning process rather than on individual MoDOT meetings. Planning partners have indicated a survey following each quarters' public outreach activities is excessive, and thus the survey participation and feedback have declined.

The following results indicate positive experiences and involvement in the outreach efforts.

- 20 of 22 completed surveys in the 4<sup>th</sup> quarter of state fiscal year 2005
- 37 of 44 completed surveys in the 1<sup>st</sup> quarter of state fiscal year 2006
- 9 of 14 completed surveys in the 2<sup>nd</sup> quarter of state fiscal year 2006
- 8 of 11 completed surveys in the 3<sup>rd</sup> quarter of state fiscal year 2006
- 15 of 21 completed surveys in the 4<sup>th</sup> quarter of state fiscal year 2006



Note: The percent for each quarter reflects agree and strongly agree answers from the survey.

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# Convenient, Clean and Safe Roadside Accommodations

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Many Missouri motorists depend on roadside parks and rest areas during their travels for the opportunity to rest and refresh themselves in a safe environment. Providing safe, clean and convenient accommodations allows motorists to travel more safely and comfortably.



## Convenient, Clean and Safe Roadside Accommodations

### *Percent of customers satisfied with rest areas' convenience, cleanliness and safety*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**

This measure helps MoDOT understand customer expectations concerning the convenience, cleanliness and safety of its rest areas. This information will provide insight to rest area location, lighting, and security as well as the overall cleanliness expectations.

**Measurement and Data Collection:**

MoDOT measures this attribute with both internal and external data collection. MoDOT receives information in the form of a survey card offered at all rest areas. The survey cards ask a variety of questions with three of the questions specifically asking if the rest area is convenient, clean and safe. This provides direct input from our customers and is considered our external source.

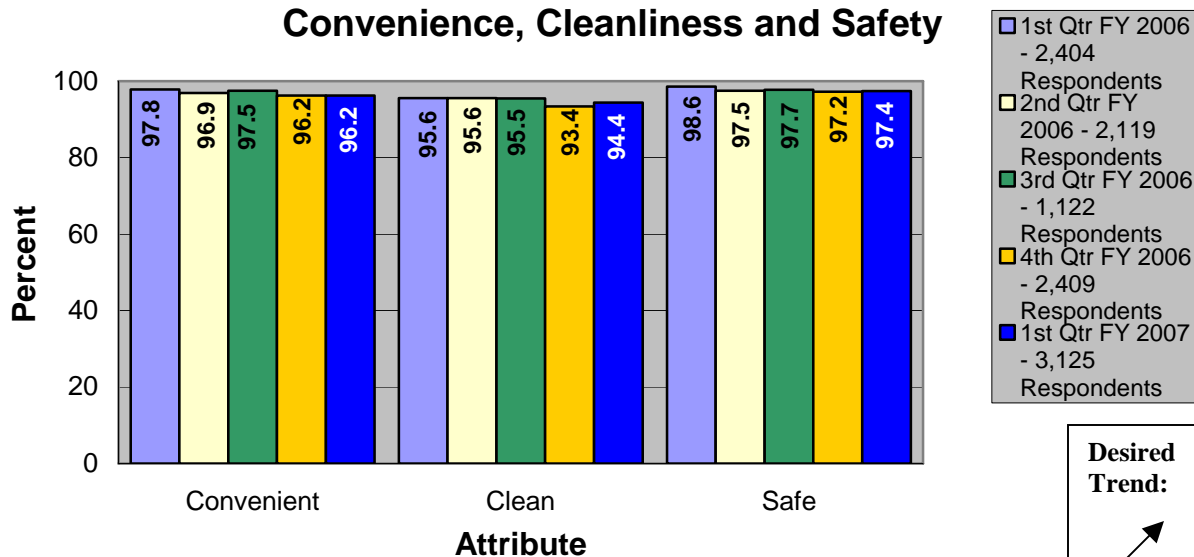
To ensure the customer satisfaction, all rest areas are inspected using an attribute list developed and based on an industry-wide literature review. The attribute list includes characteristics rest-area users identified as what they consider convenient, clean and safe. MoDOT maintenance employees inspect all rest areas at least two times per month using this list and are considered our internal source.

**Improvement Status:**

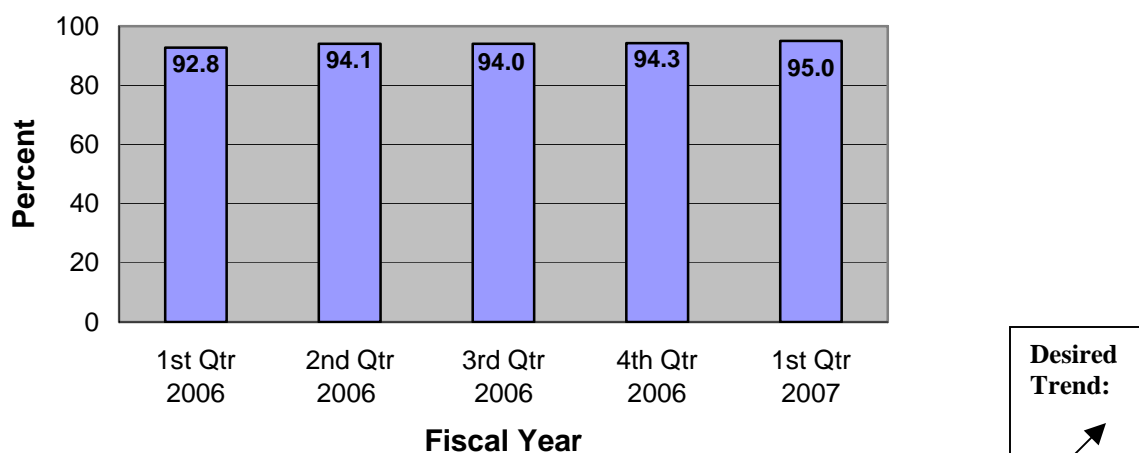
The rest area survey cards were made available in May 2005. The increase in the number of returned cards corresponds with the seasonal increase in visitors to the rest areas. A total of 2,404 cards were returned in the first quarter of fiscal year 2006, 2,119 cards in the second quarter of fiscal year 2006, 1,122 cards in the third quarter of 2006 and 2,409 in the fourth quarter of fiscal year 2006. The cards returned increased to 3,125 in the first quarter of fiscal year 2007. Customer satisfaction for all three attributes is slightly higher than the previous quarter with cleanliness having the largest increase. MoDOT has implemented actions to improve the cleanliness at rest areas with lower satisfaction ratings. Based on the cards returned from 48 different states, Canada, Ireland, the United Kingdom and Switzerland, MoDOT is meeting the needs of its customers.

The internal rest area inspections started in May 2005. MoDOT is doing extremely well at meeting the customers' expectations for convenient, clean and safe facilities, largely in part to these inspections conducted a minimum of two times per month. The average score for all rest areas in the first quarter of fiscal year 2006 was 92.8 percent, a slight increase to 94.1 percent for the second quarter of fiscal year 2006 and continued at 94 percent the third quarter of fiscal year 2006 and the fourth quarter of fiscal year 2006 scored 94.3 percent. The first quarter of 2007 scored 95 percent. MoDOT takes care of maintenance concerns in a timely manner to keep the rest areas open for use.

### Percent of Customers Satisfied with Rest Areas' Convenience, Cleanliness and Safety



### Internal Inspection Rating for Convenience, Cleanliness and Safety of Rest Areas



## Convenient, Clean and Safe Roadside Accommodations

### *Percent of customers satisfied with commuter lots' convenience, cleanliness and safety*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**

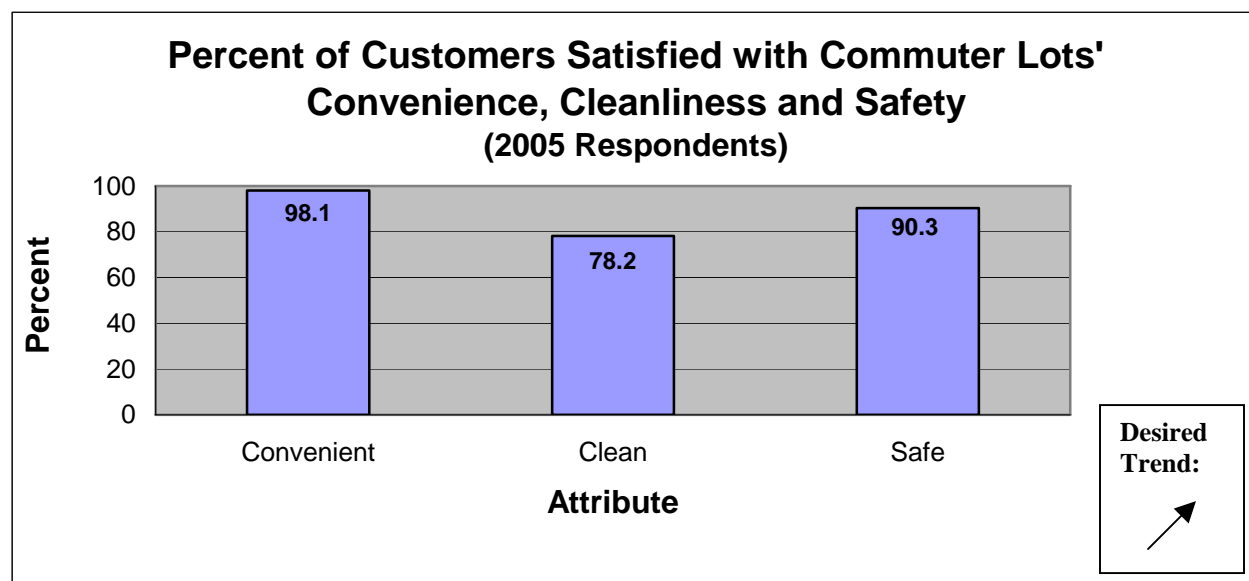
This measure will help the department understand customer expectations concerning commuter lot convenience, cleanliness and safety. This information will provide insight to location, lighting and security at commuter lots as well as their overall cleanliness.

**Measurement and Data Collection:**

MoDOT receives information in the form of survey cards distributed by MoDOT employees at 20 commuter lots. The survey card asks a variety of questions. Three questions specifically ask if the commuter lot is convenient, clean and safe. This is a baseline measure that provides direct input from the department's customers and is considered an external source.

**Improvement Status:**

Commuter lot survey cards were distributed to 1,176 customers in December 2005 and the department received 422 replies. Most of the customers thought the lots were convenient with 65 percent using them five days per week. Seventy-one percent cited saving fuel costs as the most important reason to use the lot. Ninety percent of customers were satisfied with safety at the lots with several customers expressing the need for additional lighting and almost five percent reporting theft and property damage concerns. Nearly 78 percent of the customers were satisfied with cleanliness. MoDOT received many comments about litter and the need for trash cans. Other frequent comments included better surface maintenance on the gravel and asphalt lots and expansion to provide more parking spaces in a few lots. MoDOT developed checklists for quarterly inspections at all commuter lots in the future to identify maintenance needs and improve cleanliness. The districts are working with local law enforcement agencies to improve safety by monitoring the lots with theft and property damage complaints.





## Convenient, Clean and Safe Roadside Accommodations

### *Number of users of rest areas*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

**Purpose of the Measure:**

This measure tracks the number of vehicles visiting rest areas. This information helps MoDOT better understand the peak days and times visitors use rest areas, impacting staffing decisions.

**Measurement and Data Collection:**

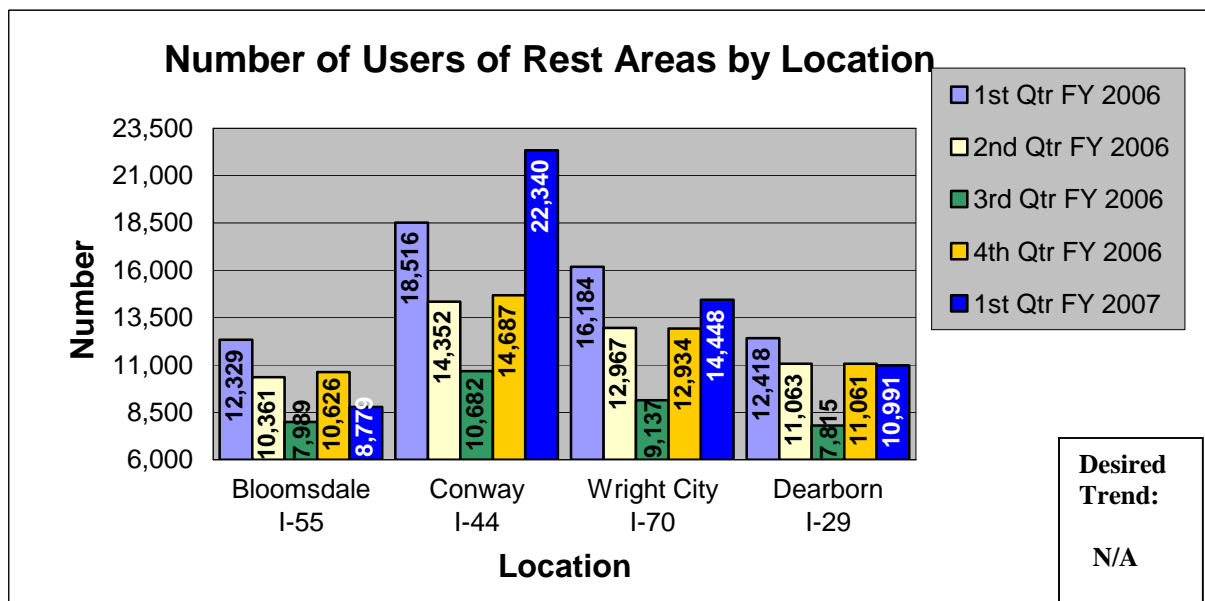
Rest areas at Bloomsdale Interstate-55, Concordia Interstate -70, Wright City Interstate -70 and Dearborn Interstate -29 have permanent counters providing data daily. Pavement-mounted sensors send data from a solar-powered wireless transfer station. All four locations have two counters for a total of eight counts. Consistent data transfer was not achieved until mid September due to set up and data transfer complications. Permanent counts are for the same time period.

Rest areas at Marston Interstate -55, Conway Interstate -44, Joplin Interstate -44 and Coffey Interstate -35 have temporary mechanical traffic counters. All four locations have two counters for a total of eight counts. Temporary counts were for different seven-day periods between Aug. 22 and Sept. 24, 2006, due to limited personnel, distance between locations and on-site equipment damage.

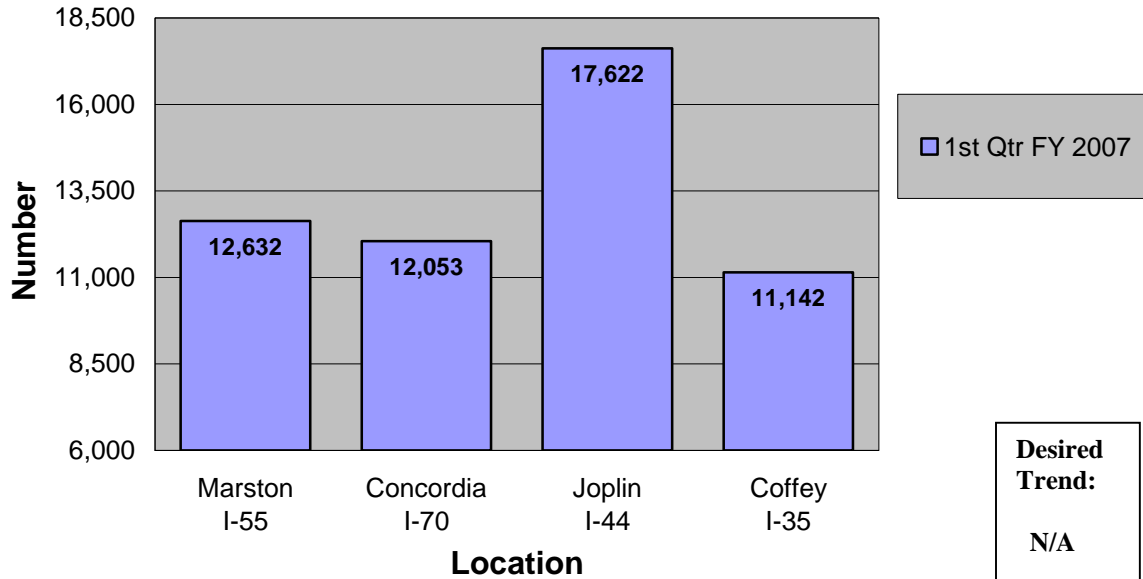
**Improvement Status:**

Three of the four permanent count sites were temporary sites in previous quarters. The fourth, Concordia, is added. Two of the four temporary sites, Joplin and Coffey, will be affected by welcome center construction in the next 12 to 18 months. Counts at these sites will provide before and after visitation patterns. Marston was selected to provide information for possible welcome center development in the region. Conway continues to be one of the busiest rest areas in the system and has been counted from the start.

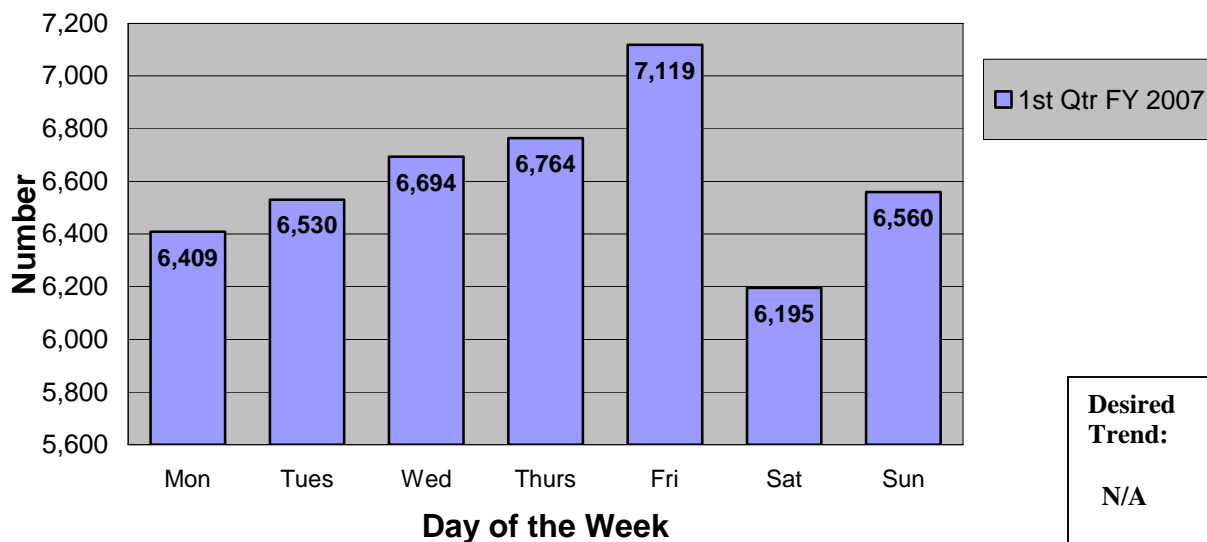
The intention is to provide counts at the eight rest areas for the same seven-day period. This was not achieved during the first quarter of fiscal year 2007. Efforts will be made to provide counts for the same seven-day period when possible. Saturday was the day with the least visitors progressing to Friday, the busiest day. Continued tracking of these eight locations will help determine patterns and peaks.



### Number of Users of Rest Areas by Location



### Number of Users of Rest Areas by Day Bloomsdale, Concordia, Wright City & Dearborn



## Convenient, Clean and Safe Roadside Accommodations

### *Number of users of commuter parking lots*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Technical Support Engineer

**Purpose of the Measure:**

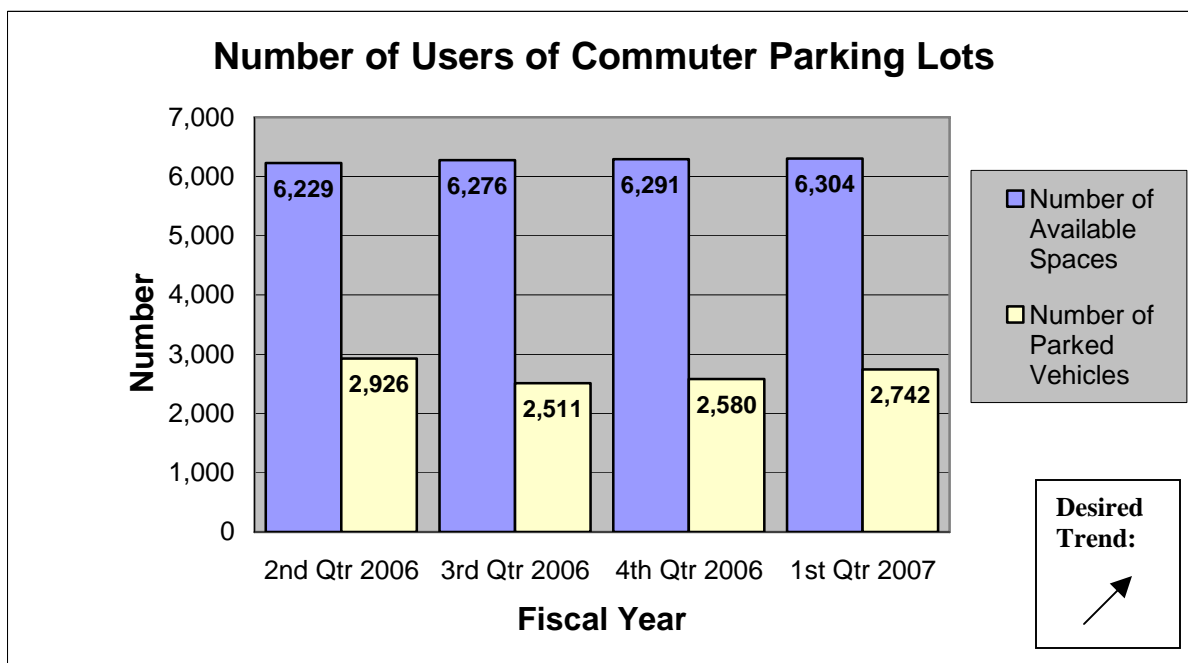
This measure tracks the number of commuter parking lot users. It will help the department determine whether the commuter parking lots provided by the department are adequate at their current locations and whether they are fulfilling the traveling public's needs.

**Measurement and Data Collection:**

District maintenance personnel count the number of vehicles parked in each commuter lot on a quarterly basis. Data is collected from every district to create a statewide report.

**Improvement Status:**

There was a minor increase in the number of vehicles parked in the commuter lots from the previous quarter, continuing the trend from the last two quarters. A press conference was held in August with the Missouri Department of Natural Resources Mid-Missouri Rideshare Program. This press conference announced the new telephone number for the Mid-Missouri Rideshare Program and encouraged motorists to use commuter parking lots to save money and fuel. MoDOT will continue to encourage motorists to use these lots through news releases. An additional commuter parking lot was opened this quarter in the north central region, and two lots that were inadvertently left off the inventory were also added. One lot in the Kansas City region was turned over to the city of Liberty and was removed from MoDOT's commuter parking lot inventory.



## Convenient, Clean and Safe Roadside Accommodations

### *Number of truck customers that utilize rest areas*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Technical Support Engineer

**Purpose of the Measure:**

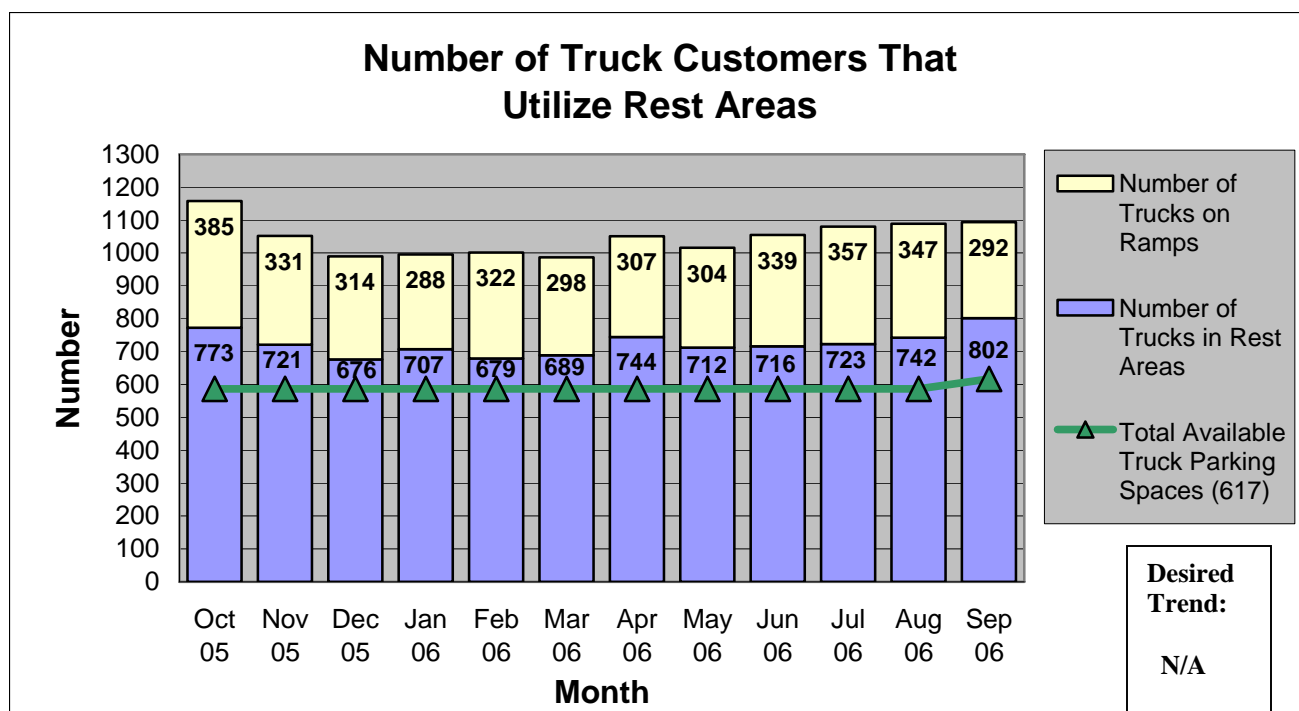
This measure tracks the number of trucks at rest areas. The numbers of trucks using the rest areas and the nearby ramps could be used to help determine how many spaces are needed to provide convenient parking facilities at each rest area.

**Measurement and Data Collection:**

On a monthly basis, district maintenance personnel will count the number of trucks parked at rest areas, on nearby ramps within 15 miles of the rest areas and at abandoned weigh stations that have been converted to truck parking facilities. The count is done between 4 and 6 a.m., which is typically the busiest time. Data is collected from every rest area to create a statewide report.

**Improvement Status:**

The number of trucks using the rest area and other truck parking facilities has seen an upward trend over the last five months. The St. Clair rest area continues to be closed to make connections to city services. The total number of trucks parked in the rest areas and other truck parking facilities outnumbers the available designated parking spaces. To address this problem, the first phase of the Missouri Interstate Rest Area Plan is being implemented. Projects for the construction of new rest area facilities at two locations are currently on the letting schedule, one in October and one in December. Also, two weigh stations that are no longer being used by the Missouri State Highway Patrol have been converted to truck parking facilities and are now being included in the counts. The total available truck parking spaces increased from 587 to 617 to include those two locations.

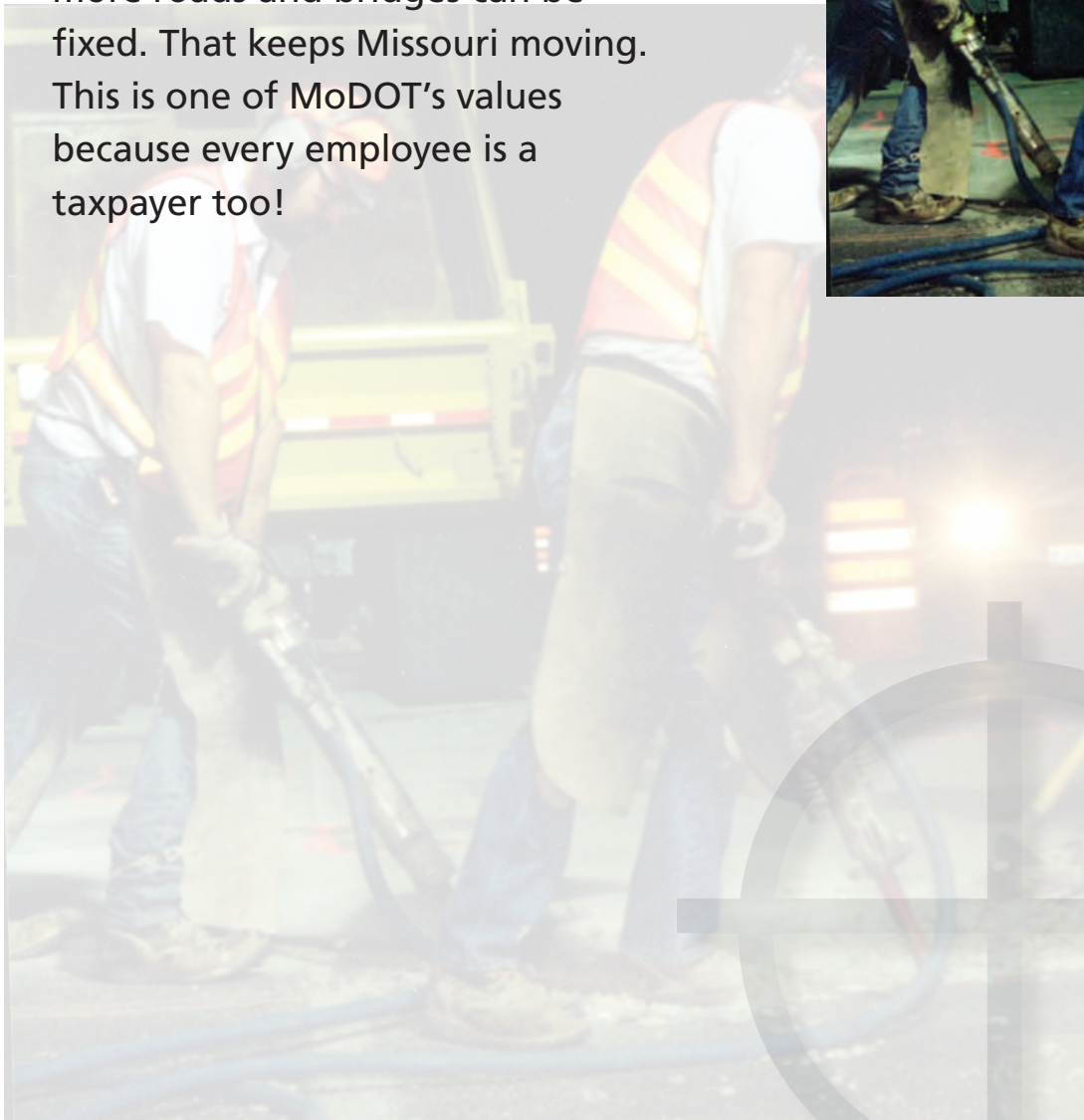


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# Best Value For Every Dollar Spent

*Tangible Result Driver – Roberta Broeker,  
Chief Financial Officer*

Providing the best value for every dollar spent means MoDOT is running its business as efficiently and effectively as possible. A tightly managed budget means more roads and bridges can be fixed. That keeps Missouri moving. This is one of MoDOT's values because every employee is a taxpayer too!



## Best Value for Every Dollar Spent

### *Number of MoDOT employees (converted to Full-Time Equivalency)*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

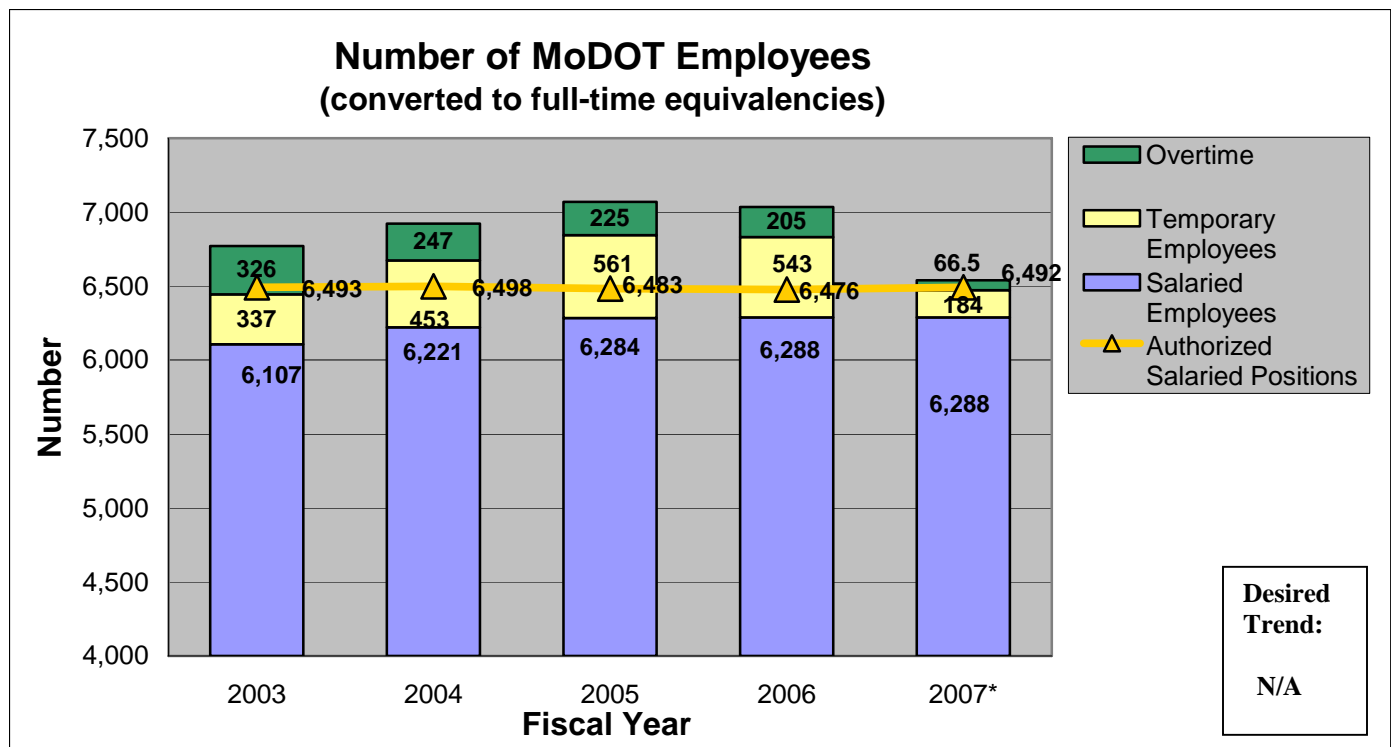
This measure tracks the growth in the number of employees within the department. This measure converts salary dollars paid to temporary and salaried employees as well as the amount paid for overtime worked to Full-Time Equivalency (FTE). In order to convert these numbers to FTEs, we divided the total number of hours worked by 2080. Overtime includes both salaried and wage employees.

**Measurement and Data Collection:**

The data is collected and reported each quarter of each fiscal year. The data is a high-level view of overall staffing at MoDOT in relation to authorized positions that could be filled.

**Improvement Status:**

For FY 2007, MoDOT has 6,492 authorized salaried positions. The number of authorized salaried positions increased over last fiscal year due to a group of Motor Carrier auditors that transferred from the Missouri Department of Revenue to MoDOT. As of Sept. 30, 2006, the actual number of salaried employees was 6,362 with an additional 460 seasonal employees working for the department. Seasonal employment is down from 608 in July 2006. District 10 hired considerably fewer seasonal employees this year, with only ten on board as of the end of this quarter.



\* For FY 2007, the Salaried Employees data has had the FTE for salaried employees used to date converted to an annual number for ease in comparison to previous years. This could not be reasonably accomplished for wage employees or for overtime.

## Best Value for Every Dollar Spent

### *Percent of work capacity based on average hours worked*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

The purpose of this measure is to track how many hours the average employee works on an annual basis. It can assist management in determining staffing and productivity levels.

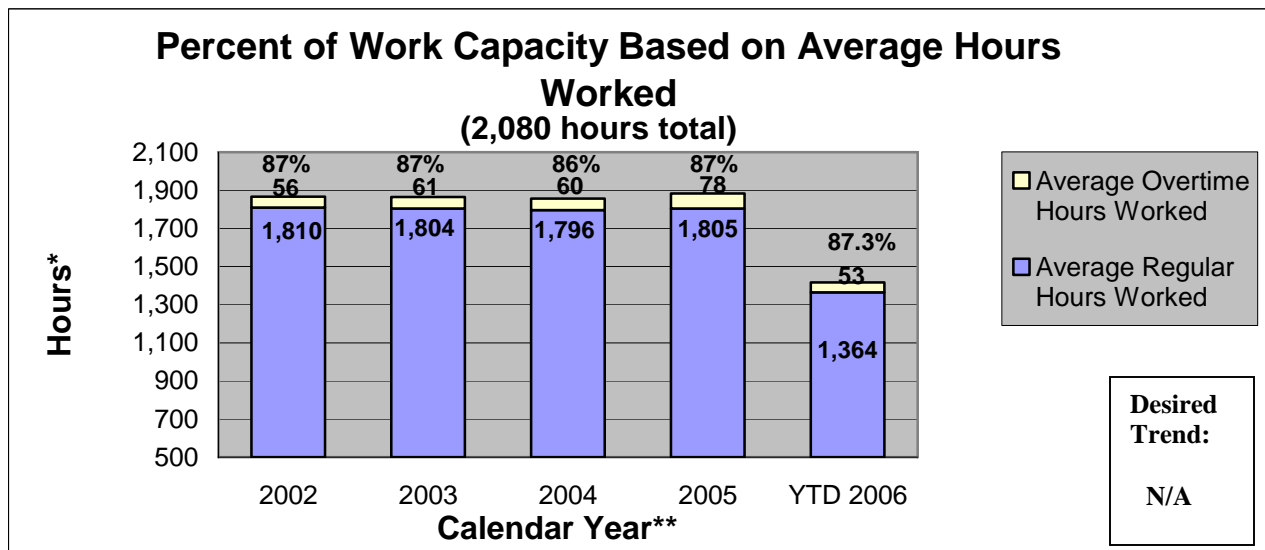
**Measurement and Data Collection:**

MoDOT measures organizational work capacity based on average regular hours worked and average overtime hours worked by employees. This measure also displays the percentage of regular hours available that are worked.

The average regular hours worked does not include seasonal or wage employees. The average overtime hours worked does not include exempt, seasonal, or wage employees.

**Improvement Status:**

In the July 2006 Tracker MoDOT reported a year-to-date work capacity at 88.2 percent. Work capacity has fallen to 87.3 percent year to date at the end of September. Employees worked an average of 21 hours of overtime this quarter, with most overtime worked by district staff. District 10 had the highest amount of overtime, averaging nearly 75 hours per employee. A considerable amount of overtime was worked by all categories of district employees except the office staff. Employees in the technician categories worked the most overtime, and several districts had a high rate of overtime in the professional category. During the most recent quarter, districts and Central Office saw an average absenteeism rate of 13.7 percent. The highest absenteeism rate was 14.3 percent and the lowest was 12.5 percent. Again this quarter, sick leave usage averaged 18.9 hours per employee statewide. Human Resources staff members continue to share strategies for dealing with leave misuse with all supervisors as issues come to light.



\* Annual average per employee

\*\* Percentage does not include overtime hours



## Best Value for Every Dollar Spent

### *Rate of employee turnover*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

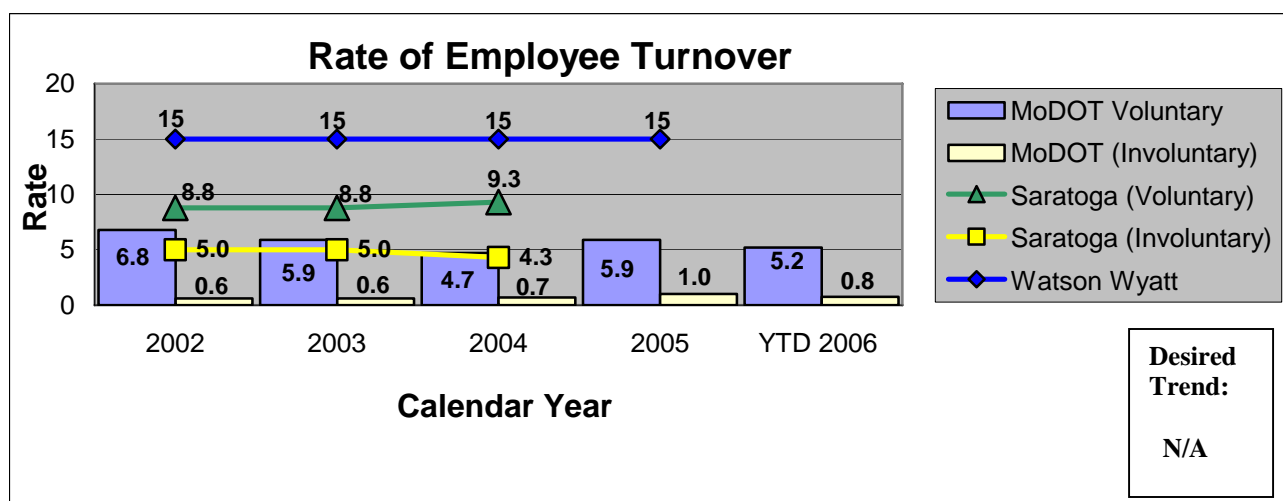
This measure tracks the percentage of employees who leave MoDOT annually and compares the department's turnover rate to benchmarked data. Voluntary turnover includes resignations and retirements. Involuntary turnover includes dismissals only. Turnover rate includes voluntary separations, involuntary separations, and deceased employees.

**Measurement and Data Collection:**

The data will be collected statewide to assess employee overall turnover. Comparison data will be collected from various sources annually. For benchmarked data, Saratoga Institute surveyed 288 organizations representing a wide variety of industries. In addition, the Watson Wyatt study determined the optimum turnover rate by analyzing turnover rate compared to organizational financial performance.

**Improvement Status:**

Through September 2006, there have been 389 separations with 36.5 percent due to retirement and 49 percent due to resignations. In this most recent quarter, an additional 22 employees in civil engineering positions left MoDOT and four of these were in managerial positions. The urban districts continue to have the highest turnover rates overall as well as the highest rates for civil engineers. This quarter, four information technologists resigned from the department. The Human Resources Division (HR) worked with Information Systems Division management to implement changes to the first-line supervisory positions effective Aug. 1. These changes included some equity increases for employees already in these positions. Another area of concern is a higher turnover rate for employees in crew worker positions in the metropolitan districts. HR has completed three quarters of the staff work on the job study for the field maintenance positions with findings to be issued in early December. HR developed strategies to address the turnover in this job group and plans to make a recommendation as part of the job study implementation.



\* Saratoga's data for CY 2005 or YTD 2006 is unavailable at the time of print.



## Best Value for Every Dollar Spent

### *Percent of satisfied employees*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

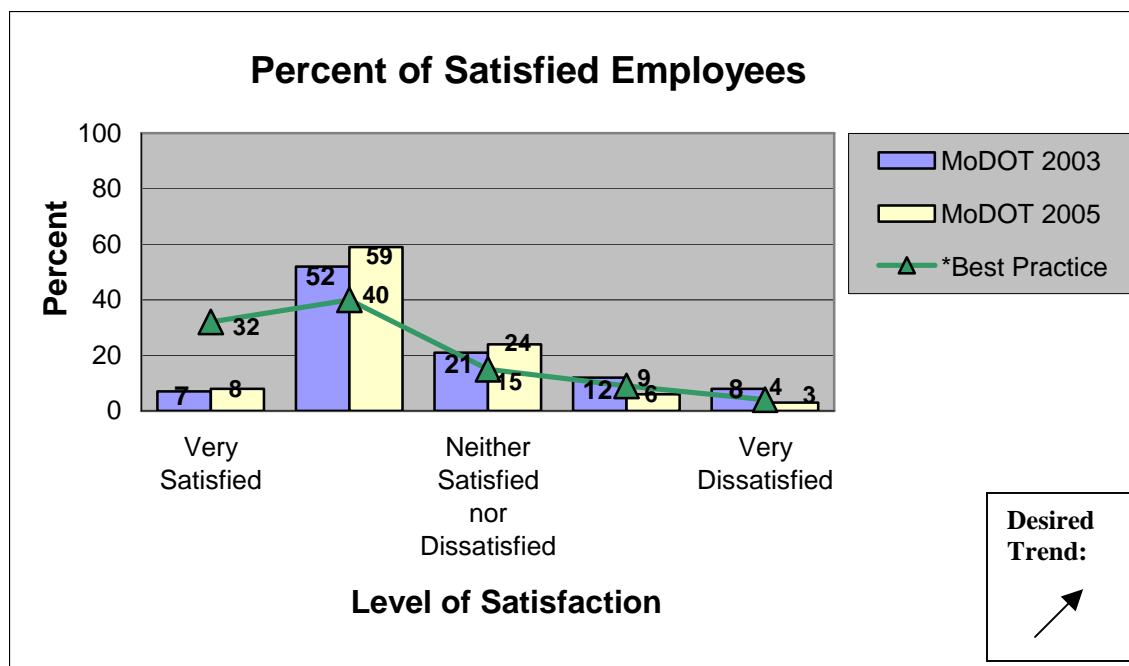
This measures the level of employee satisfaction throughout the department in comparison to the organization that scored the best in employee satisfaction using the same survey instrument.

**Measurement and Data Collection:**

Employee satisfaction is measured using 18 items from an annual employee survey. Best practice data for an anonymous company was provided by the vendor contracted to conduct the employee survey. A survey to gather data will be distributed again in 2007.

**Improvement Status:**

The employee satisfaction subcommittee, made up of several senior management and Employee Advisory Council members, has implemented an action plan to address four of the seven recommendations from the Employee Satisfaction Survey. The action plan includes items to address morale, trust, empowerment, communication, and organizational fairness. Management in Central Office and the districts are implementing the communication plan as discussed at the Senior Management Team (SMT) meeting in June. Empowerment and diversity messages have been shared with the SMT to communicate down the line. MoDOT Director Pete Rahn hosted his first Brown Bag Lunch, where he shared information and answered questions from approximately 85 employees from across the state. The questions and Pete's response to each were shared with all employees through email and are posted on the department's Intranet. The Human Resources Division (HR) created and distributed a listing of preferred employee qualities, which supervisors should be considering when filling vacant positions. HR also has shared information directed to employees on how to prepare themselves for promotion.



\* Best practice data for an anonymous company was provided by the vendor contracted to conduct the employee survey

## Best Value for Every Dollar Spent

### *Number of lost workdays per year*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Beth Ring, Risk Management Director

**Purpose of the Measure:**

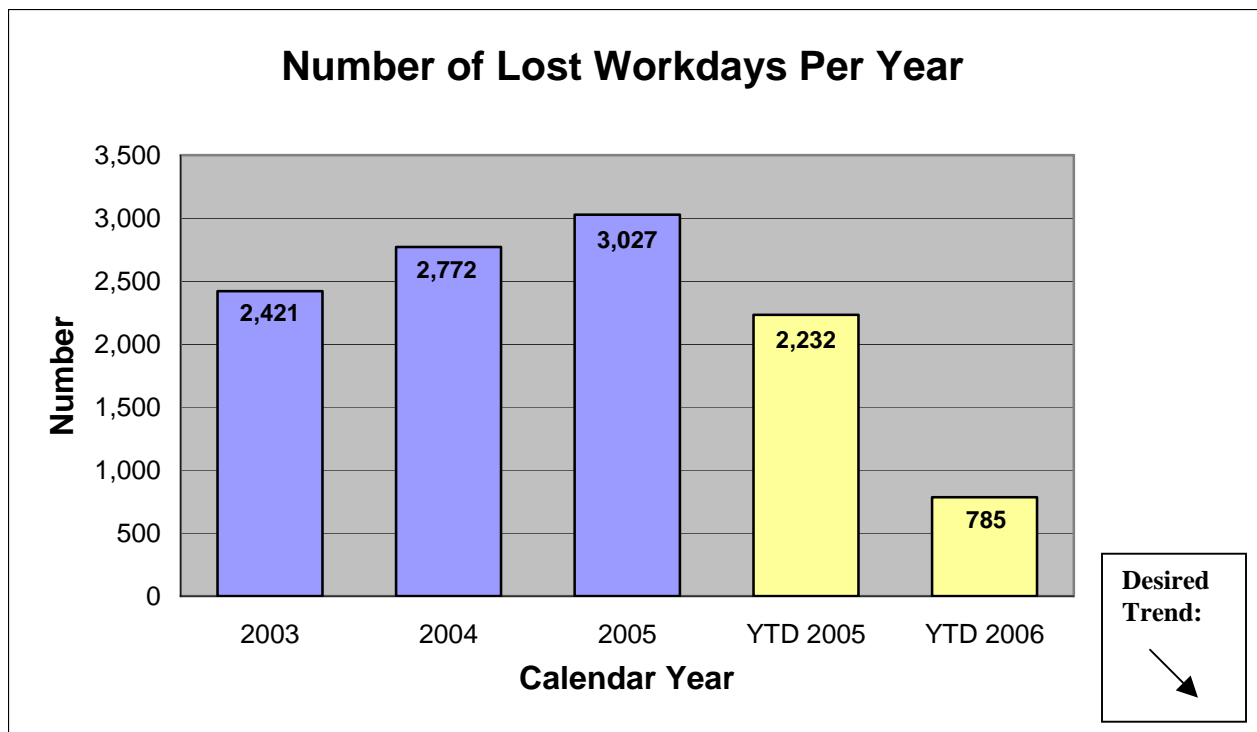
This measure tracks the actual number of days that employees cannot work due to work-related injuries sustained during the reporting period. Note that the results do not include lost workdays for injuries that occurred during previous reporting periods. (Example: an employee that is injured on December 31, 2005 and is off during January of 2006 will not show up as lost time in 2006 because the incident occurred during the previous reporting period.)

**Measurement and Data Collection:**

The data is collected from Riskmaster, the risk management software, and reported quarterly.

**Improvement Status:**

The number of lost workdays year-to-date Sept. 30, 2006 is 65 percent lower than the same period last year. Likewise, the number of lost-time incidents decreased by 62 percent for the same period. The largest increase in lost workdays occurred in Central Office Bridge Maintenance, while districts 1, 3, 4, 5, 6, 9 and 10 show significant decreases. MoDOT continues to develop and implement new safety-related initiatives to further reduce lost workdays including a new safety recognition program, a work simulation physical exam and a fitness for duty program. The Risk Management Division now directs all medical care for work-related injuries. MoDOT continues to identify and provide light duty assignments for injured workers with restrictions in an effort to get them back to work quickly.



## Best Value for Every Dollar Spent

### *OSHA recordable incidents by rate and total*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Beth Ring, Risk Management Director

**Purpose of the Measure:**

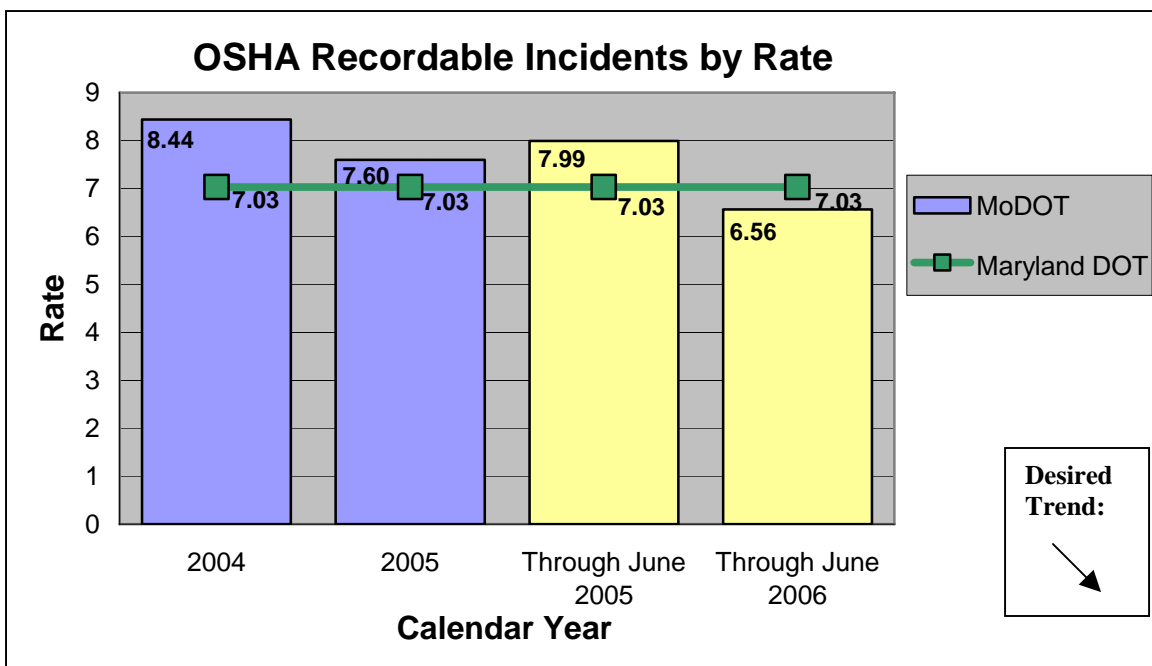
This measure tracks the number of recordable injuries, as defined by OSHA, in total and as a rate of injuries per 100 workers. The calculation for incidence rate is (number of recordables \* 200,000)/number of hours worked. The 200,000 used in the calculation is the base for 100 full-time workers (working 40 hours per week, 50 weeks per year). OSHA defines a recordable incident as a work-related injury or illness that results in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness.

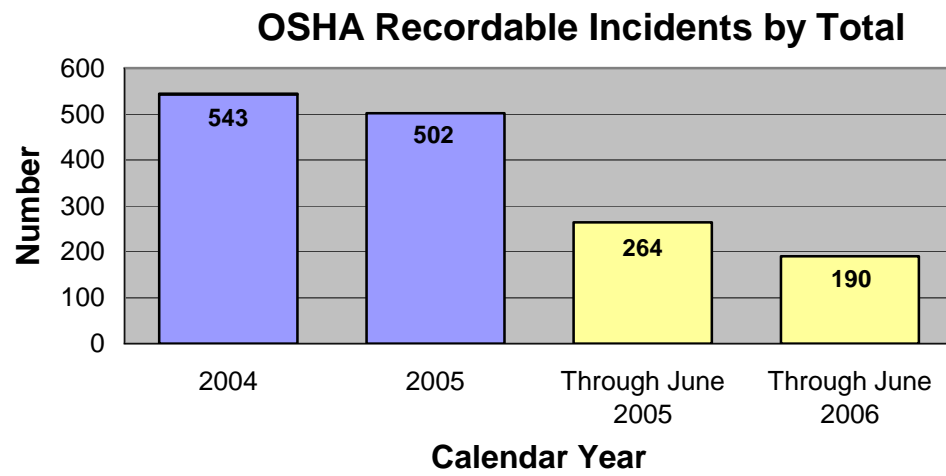
**Measurement and Data Collection:**

We report on the measure quarterly, one quarter in arrears, and collect the injury data from Riskmaster, the Risk Management claims administration software. The Controller's Division gathers the number of hours worked from the HR Payroll Datamart. The benchmarking data for YTD, June 2005 and 2006 is unavailable so the calendar year 2005 statistics were used as an approximation.

**Improvement Status:**

The number of OSHA recordables and the incidence rate has declined over the reporting periods noted. The department has reduced its injury rate as a result of successfully implementing numerous safety-related initiatives.





**Desired  
Trend:**



## Best Value for Every Dollar Spent

### *Building expenditures per square foot*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Chris Devore, General Service Manager - Facilities

**Purpose of the Measure:**

This measure tracks the cost of operating department buildings, building capital improvements and capital asset preservation projects.

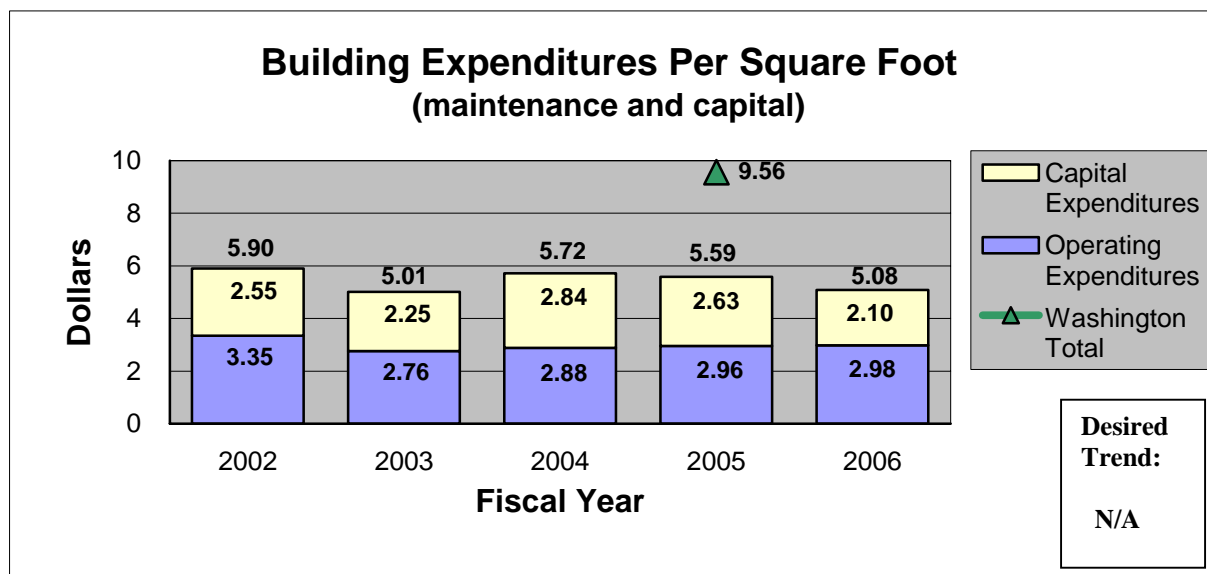
**Measurement and Data Collection:**

The data is collected based on expenditures recorded in the statewide financial accounting system. The following expenditures are included in the analysis: the cost of labor, benefits, and materials for central office facilities management and facilities maintenance. It does not include the employer's share of Social Security/Medicare taxes and the department's match for deferred compensation. Operating expenditures, including repair supplies, custodial supplies, janitorial and other services, maintenance and repair services, building and storage leases, and utilities have been included. Capital expenditures include new construction and asset preservation projects.

**Improvement Status:**

As operational needs developed, extra consideration and funding were expended to repair/replace with energy efficient options. These improvements have included, but are not limited to, installing energy efficient windows, overhead doors, and new HVAC system and insulating maintenance bays. A team of MoDOT and DNR employees was established to seek out opportunities for MoDOT to become more energy efficient. The Director will be presented with goals to achieve and ideas for saving energy.

The benchmark is from the Washington State DOT (WSDOT). Based on its budget the approximate capital expenditures for 2005 were \$3.44 per square foot and the approximate operating expenditures were \$6.12 per square foot.



## Best Value for Every Dollar Spent

### *Fleet expenses compared to fleet value*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeannie Wilson, General Services Manager - Fleet

**Purpose of the Measure:**

This measure tracks costs for MoDOT's fleet, as well as its condition. The first chart compares repair cost, acquisition expenditures, and total fleet value. The second chart provides an overall fleet condition status based on actual fleet age and meter compared to maximum life cycle thresholds.

**Measurement and Data Collection:**

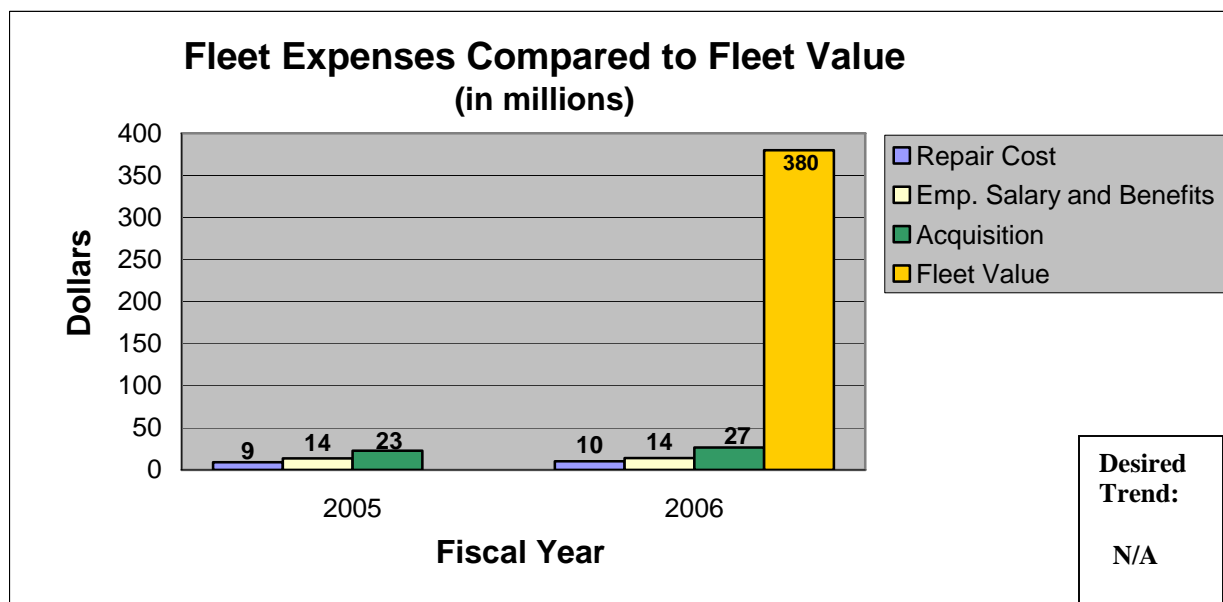
The expenditures are collected from the statewide financial accounting system. All costs associated with repairs, supplies and maintenance for all fleet items are included in the analysis. Fleet value is established based on current replacement cost for all active units.

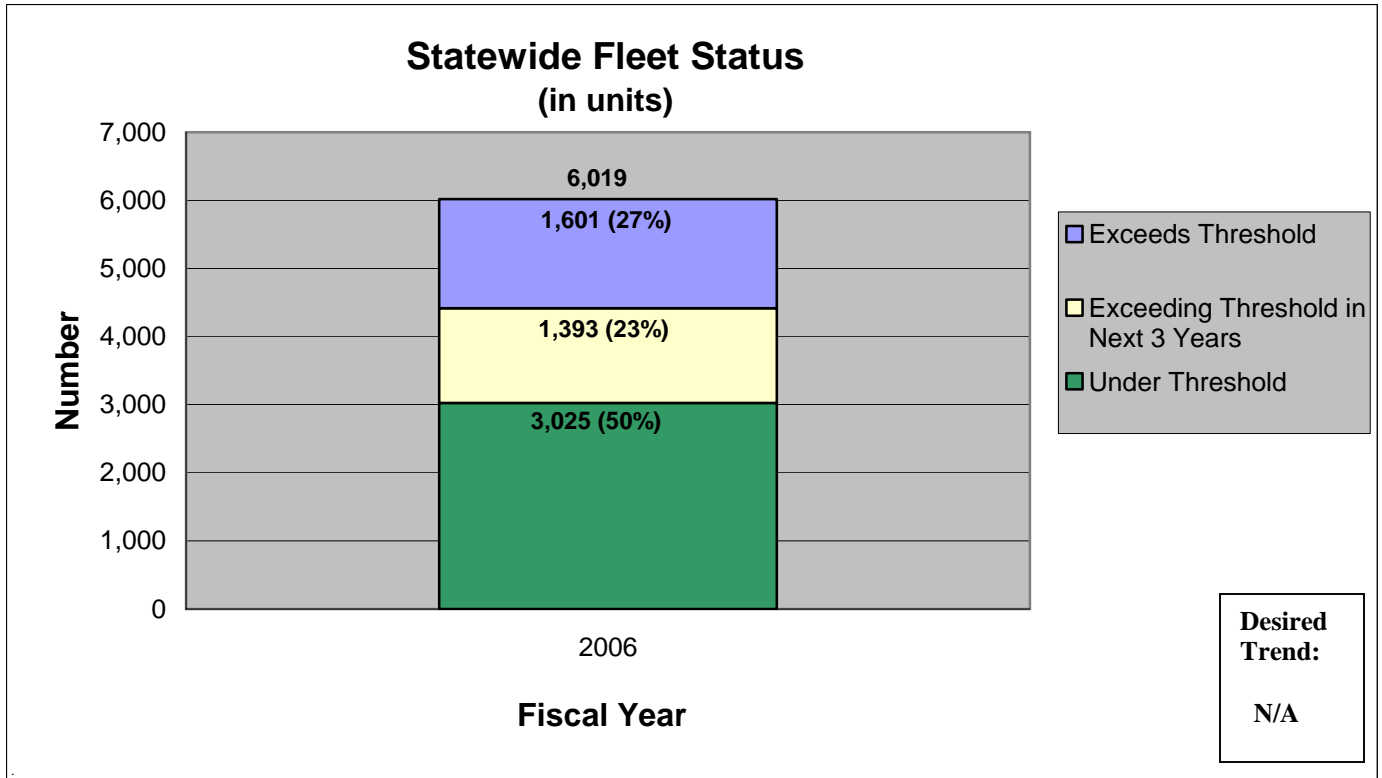
Age and meter thresholds were established based on maximum life usefulness. Units are identified as either exceeding their primary life cycle for either its age or meter, reaching maximum primary life in the next three years; and not exceeding the threshold within the next three years.

**Improvement Status:**

The repair costs to MoDOT's fleet increased from \$9 million to \$10 million from FY 2005 to FY 2006, while MoDOT's salary and benefit costs for its fleet employees remained the same at \$14 million in both fiscal years. Acquisition costs for new fleet increased from \$23 million to \$27 million from FY 2005 to FY 2006. The total value of MoDOT's fleet in 2006 was \$380 million.

The Fleet Optimization Team was formed in March 2006 and met weekly through April to review the current fleet structure and to identify process and policy changes that would result in better overall fleet management. The team provided recommendations to management in May 2006. Team members, along with fleet services and district staff, will be implementing recommendations to eliminate underutilized equipment as the first step in right-sizing the fleet.





## Best Value for Every Dollar Spent

### *Dollars expended on consultants other than program consultants*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

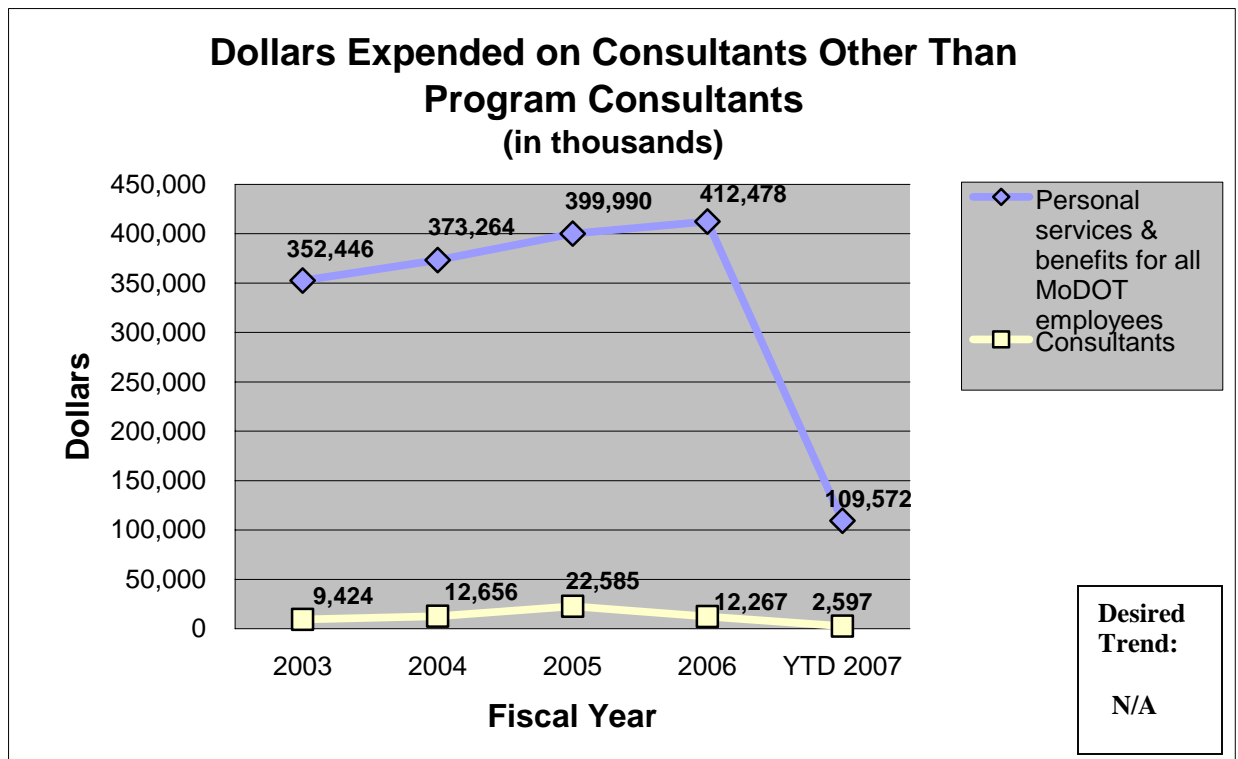
The measure tracks the department's use of consultants for other than right of way and construction. The department utilizes consultants to complement employee resources and expertise. Reporting heightens awareness and provides a tool to measure the utilization of consultants.

**Measurement and Data Collection:**

The data is collected based on expenditures recorded in the statewide financial accounting system. The data includes expenditures for professional services and computer information services.

**Improvement Status:**

Expenditures for consultants in a fiscal year are dependent on the department's needs. Fluctuations between fiscal years are not abnormal. The department will continue to utilize non-design consultants for specialized services and to supplement available employee resources. FY 2007 information systems' projects utilizing consultants include the completion of the Motor Carrier Services and Medical and Life Insurance Projects along with the start and completion of the Crystal Software Upgrade and the Broadband Wireless Projects. Estimated consultant costs related to these four projects total \$2.3 million. Completion of the Motor Carrier Services project was anticipated in FY 2006, however, it continued to FY 2007. Other anticipated consultant costs in FY 2007 include the Missouri Statewide Traffic Data and Traveler Information system and completion of the MoDOT Emergency Communication Services system.





## Best Value for Every Dollar Spent

### *Percent of vendor invoices paid on time*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

This measure tracks the Department's timeliness in processing vendor payments.

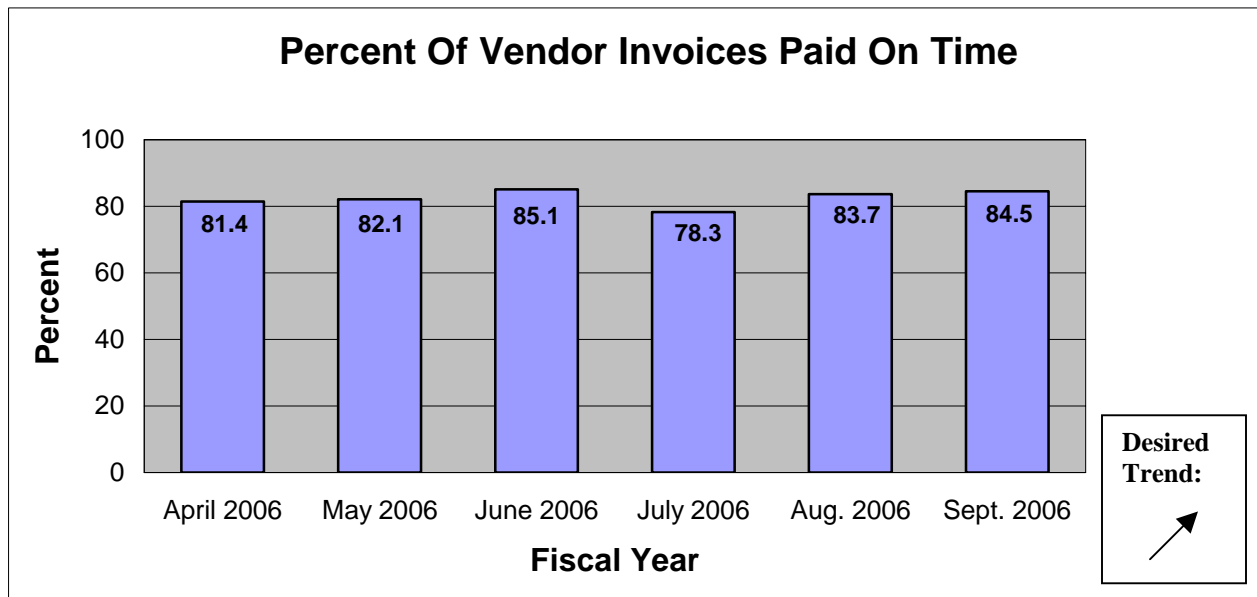
**Measurement and Data Collection:**

The check date determines if invoice payment is timely. Timely is defined as a check issued less than 31 days from the date of the invoice.

**Improvement Status:**

Vendors age their receivables based on the date of invoice. The measure indicates there are still opportunities for improvements to ensure vendors consider the department a good customer. The steps to further improve are: (1) identify specific vendors experiencing delayed payment and work with those vendors to obtain timely, accurate invoices, (2) determine if delayed payments are common to a particular division within central office or a district, and (3) identify processes contributing to the delayed payment.

District and divisional analysis tools have been developed to assist in identifying areas where improvements can be made.



## Best Value for Every Dollar Spent

### *Average cost of outsourced design and bridge engineer vs. full costed full-time employee*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

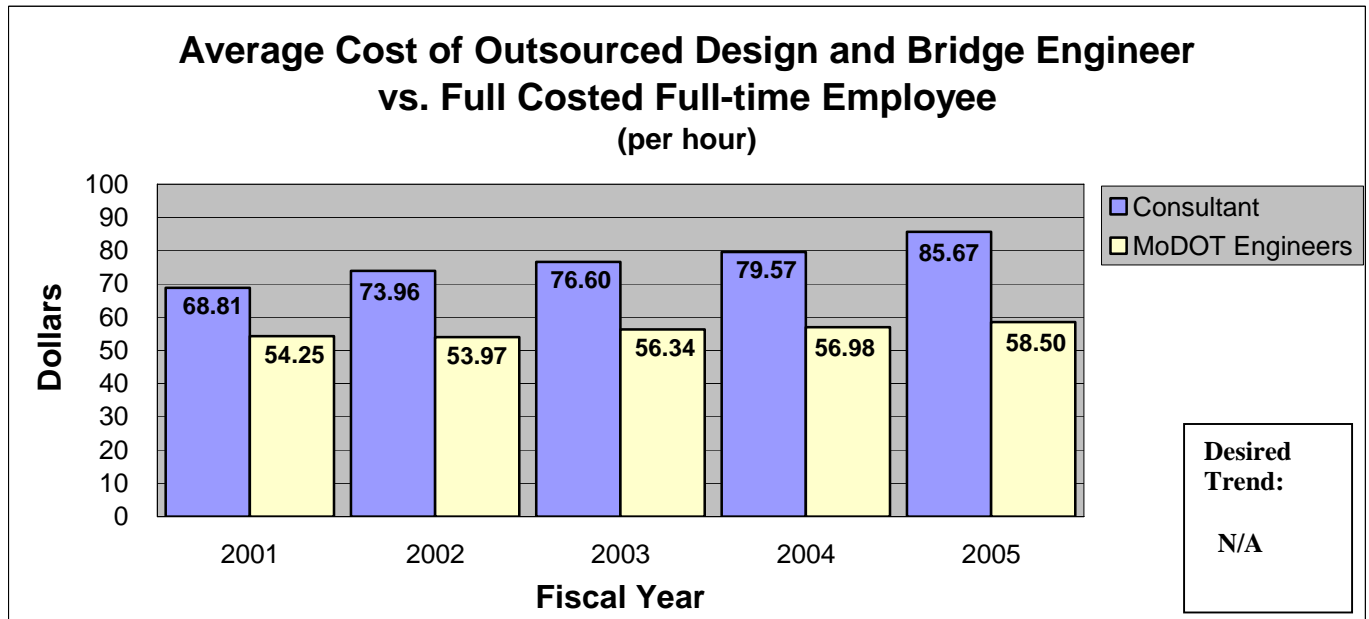
The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with the emphasis of spending for design and bridge engineering efforts.

**Measurement and Data Collection:**

The data collection is based on outsourced contracts and employee expenditures.

**Improvement Status:**

The process is to measure external design consultant costs and compare to MoDOT staff design engineer costs. Both categories are fully costed and comparable. Consultant rates increased 7.1 percent from 2004 to 2005 while MoDOT design and bridge engineer costs increased 2.6 percent for the same period. The desired trend is to narrow the profit factor gap between the two rates. The FY 2006 rates will be included in the January 2007 Tracker.



## Best Value for Every Dollar Spent

### *Distribution of expenditures*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

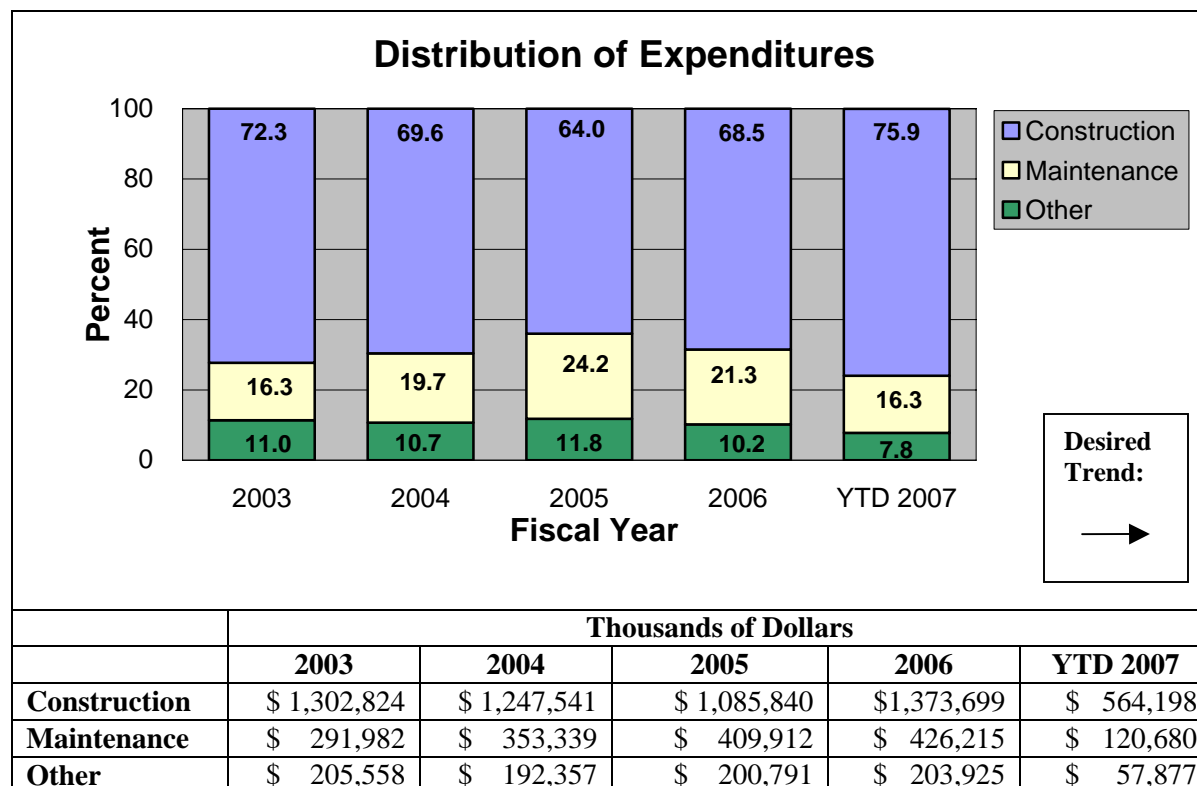
The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with the emphasis of spending on the construction and maintenance of our transportation system.

**Measurement and Data Collection:**

The data collection is based on cash expenditures by appropriation. Construction and maintenance expenditures are defined as expenditures from the construction and maintenance appropriations. Other expenditures include: administration, multimodal, information systems, fleet, facilities, and other services appropriations.

**Improvement Status:**

The department's emphasis is on expenditures for routine maintenance of the system (maintenance appropriation) and renovation and construction of the system (construction appropriation). Construction expenditures have increased overall, percentage and dollars, as construction projects have accelerated as a result of bond proceeds. Expenditures from appropriations other than construction and maintenance remain constant, which is consistent with the desired trend.



## Best Value for Every Dollar Spent

### *Percent variance of actual state highway user revenue vs. projections*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Manager

**Purpose of the Measure:**

The measure shows the precision of the state highway user revenue projections.

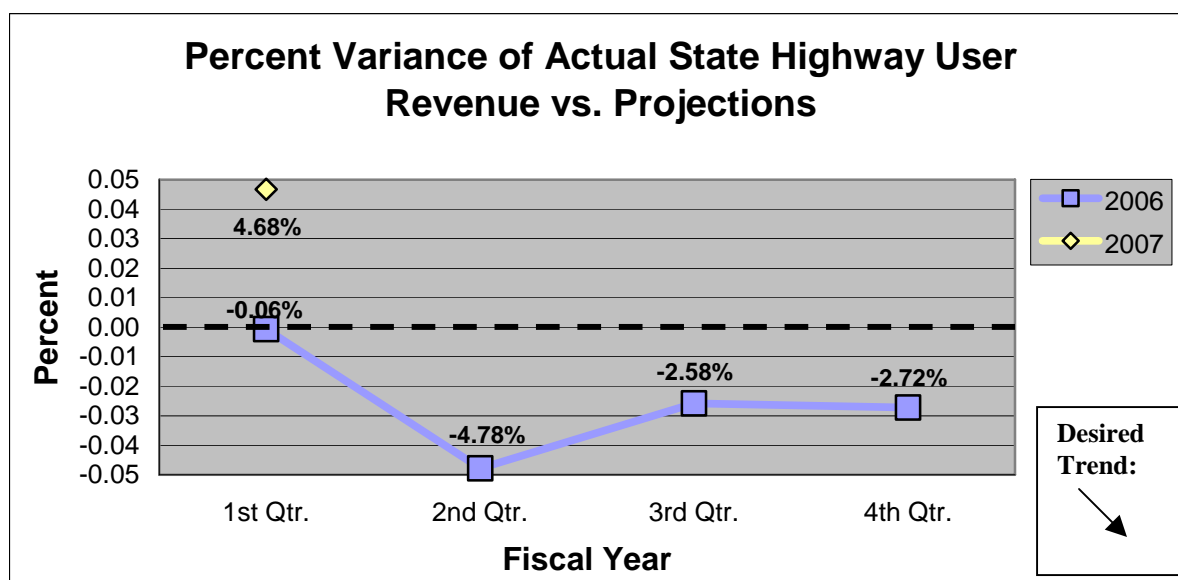
**Measurement and Data Collection:**

State highway user revenue includes: Motor Fuel Taxes, which are taxes collected on each gallon of motor fuel purchased; License and Fees, which are driver licenses and taxes and fees collected on motor vehicle licensing and registrations; and Sales and Use Taxes, which are taxes collected on the purchase of motor vehicles.

Projections are based on the current financial forecast. Percent is based on year-to-date revenues. The actual data is provided monthly to Resource Management by the Controller's Division.

**Improvement Status:**

The actual state highway user revenue was greater than projected through the first quarter of fiscal year 2007. The projected revenue was \$247.7 million. However, the actual receipts were \$259.3 million, a difference of \$11.6 million and a positive variance of 4.68%. The desired trend is for the actual revenue to match projections with a variance of zero percent. MoDOT staff continues to analyze current revenue trends in preparation for the next forecast.



## Best Value for Every Dollar Spent

### *MoDOT national ranking in revenue per mile*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Manager

**Purpose of the Measure:**

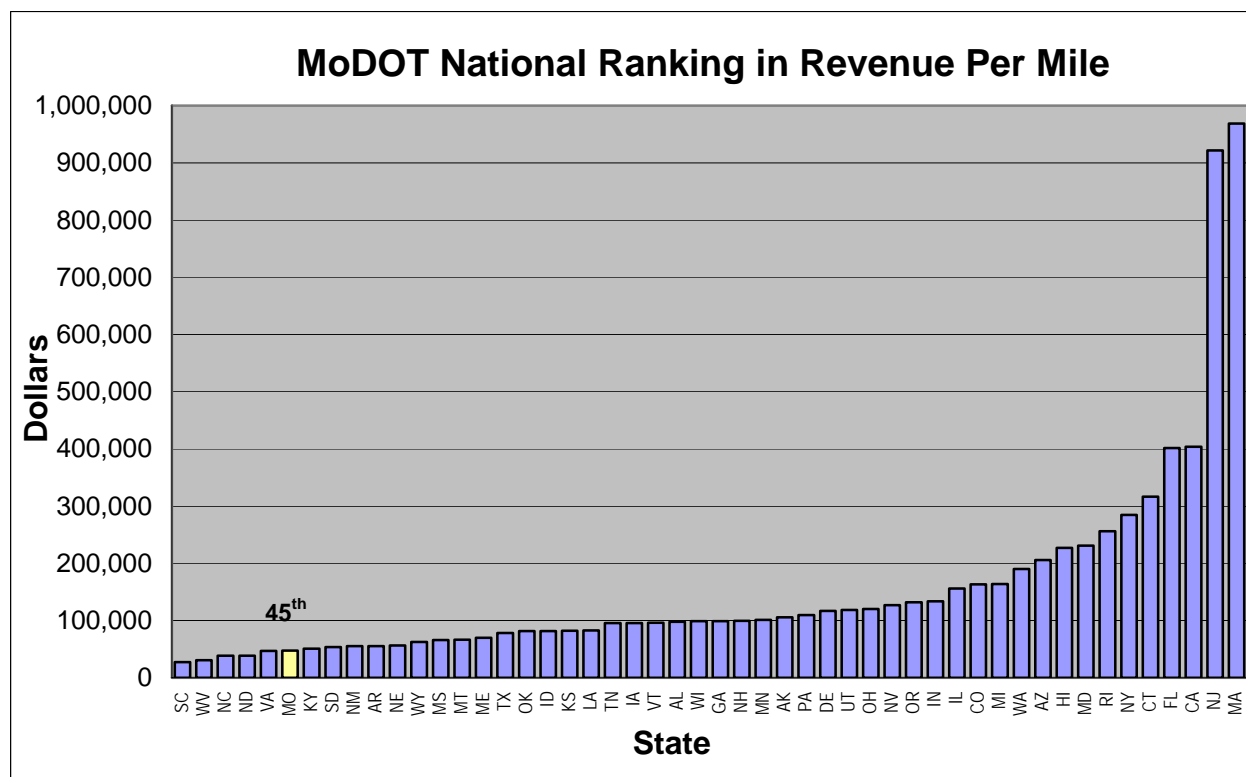
This measure shows Missouri's national ranking in the amount of revenue per mile that is available to spend on the state highway system.

**Measurement and Data Collection:**

Revenue is the total receipts less bonds as reported in the Federal Highway Administration's annual highway statistics report entitled, *Revenues Used By States For State-Administered Highways*. The mileage is the state highway agency miles as reported in the Federal Highway Administration's annual highway statistics report entitled, *Public Road Length – Miles By Ownership*. Resource Management collects this information from the Federal Highway Administration.

**Improvement Status:**

Missouri's revenue per mile of \$47,463 currently ranks 45<sup>th</sup> in the nation. Missouri has a very large state highway system, consisting of 32,471 miles, which is the seventh largest system in the nation. Massachusetts revenue per mile of \$968,448 ranks first, however, their state highway system contains only 2,841 miles. MoDOT staff continues to communicate with the public the need for additional transportation funding. Missouri's transportation needs greatly exceed current available funding.



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# Attractive Roadsides

*Tangible Result Driver – Don Hillis,  
Director of System Management*

An enjoyable transportation experience includes more than a smooth surface – motorists expect to see roadsides free of litter and debris, well-managed and maintained grass and other vegetation and other attractive enhancements. MoDOT works to meet and exceed expectations for roadsides. Beautiful roadsides are visible proof that MoDOT takes pride in everything it does.



## Attractive Roadsides

### *Percent of roadsides that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**

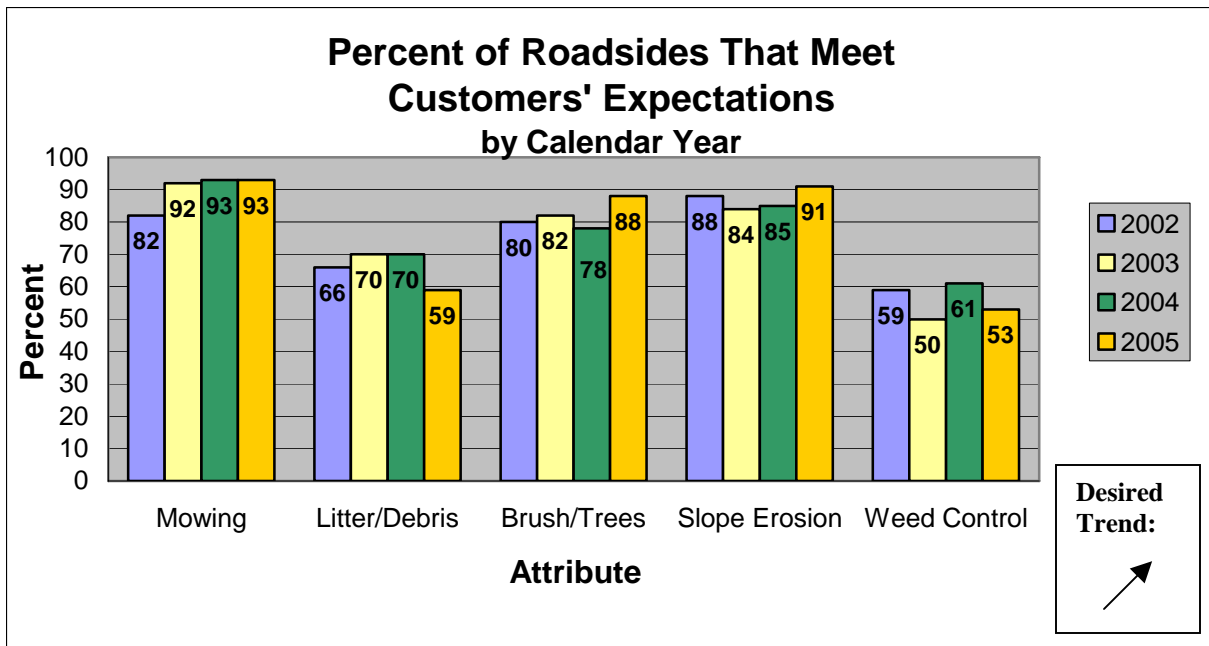
This measure tracks the percent of MoDOT's roadway system that meet customers' expectations for attractiveness.

**Measurement and Data Collection:**

A list of roadside quality attributes were developed and approved based on an industry-wide literature review. The attributes selected for this measure were used to develop a quality assurance checklist for roadside attractiveness. Data collection for this measure is based on a yearly inspection of a number of randomly selected sample sites located throughout the state. The random sites are inspected yearly for each attribute.

**Improvement Status:**

Over the past four reporting years, the five roadside attributes referenced below have shown varying trend lines. By sharing these results with district personnel, they are able to shift resources to improve in all categories. A reduction in resources for mowing, brush/tree removal, and slope erosion or other maintenance activities is necessary to allow resources to be shifted to weed control and litter/debris pickup to improve the overall results of those activities which decreased significantly in 2005. MoDOT will make greater efforts to control the growth of noxious weeds and expand the effort to pick up litter to improve these results in 2006.





## Attractive Roadsides

### *Number of miles in Adopt-A-Highway program*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

**Purpose of the Measure:**

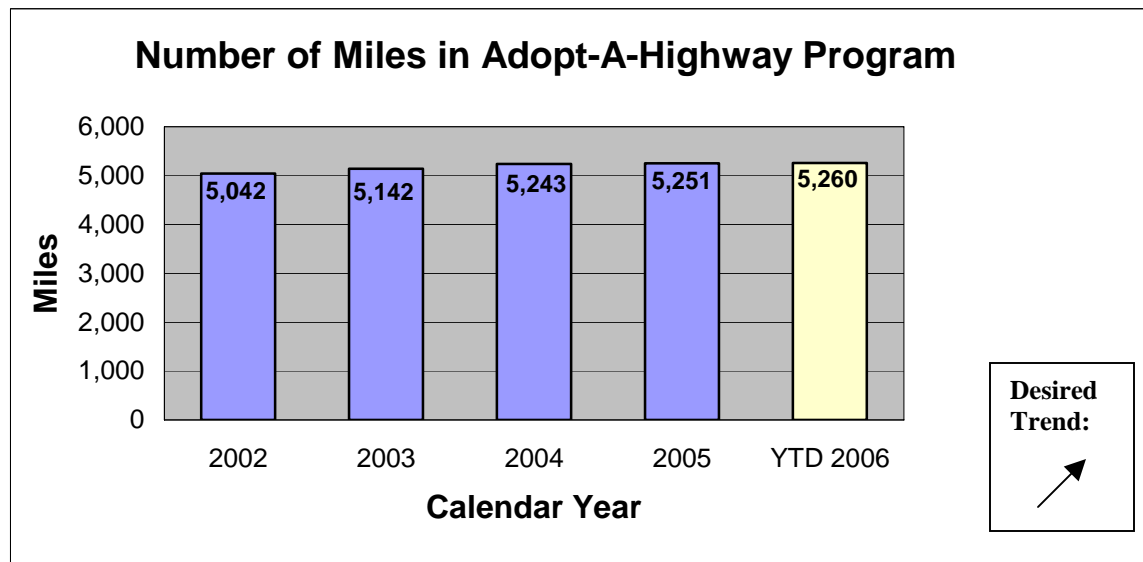
This measure tracks public involvement in taking care of Missouri's roadsides through the Adopt-A-Highway program. Missouri has one of the largest and oldest Adopt-A-Highway programs in the nation. The volunteers learn about litter awareness and some of the challenges MoDOT faces, while allowing maintenance crews to do more critical activities.

**Measurement and Data Collection:**

Adopters agree to pick up litter on a designated roadway section for a minimum of four times a year and report their results. Adopters commit to a three-year agreement when they join the program. Urban adoptions are for a minimum of one-half mile and rural adoptions are for at least two miles. Miles are measured by the centerline, however, volunteers are responsible for both sides of the roadway. Adopter-related information is maintained in an Adopt-A-Highway database using the Transportation Management System.

**Improvement Status:**

In recent years, the number of miles adopted has been increasing. Growth from 2002 to 2004 may be due to increased public awareness through No MOre Trash!, a litter-prevention campaign coordinated by MoDOT and the Conservation Department. Total miles increased in 2006 with 270 new adoptions. Simplified Adopt-A-Highway rules and regulations became effective Aug. 30, 2006. The program will continue to be promoted at Earth Day, state and county fairs, and other events.



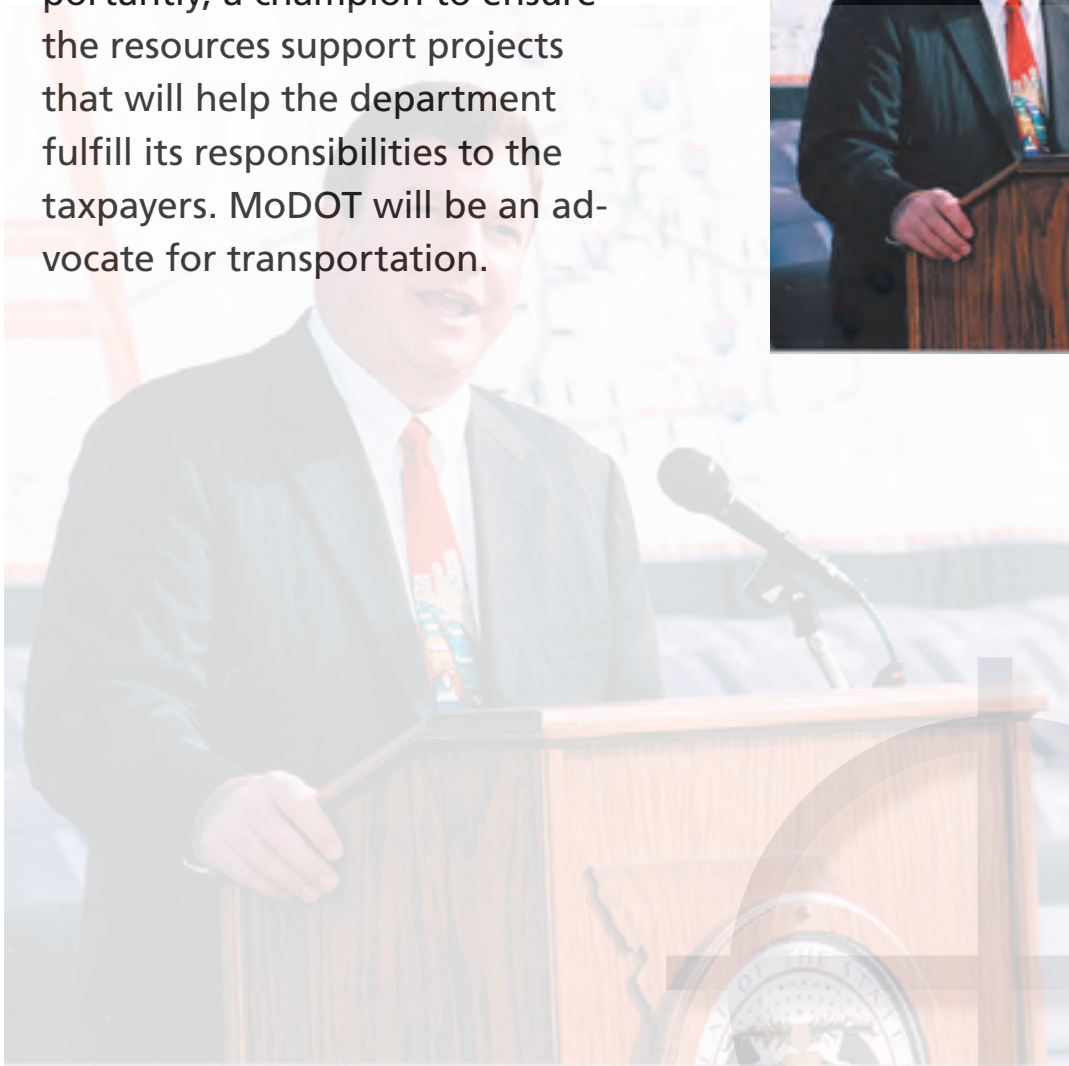
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# Advocate for Transportation Issues

*Tangible Result Driver – Pete Rahn,  
Director of MoDOT*

Transportation issues can be extremely diverse and complex. An efficient transportation system requires leadership and, most importantly, a champion to ensure the resources support projects that will help the department fulfill its responsibilities to the taxpayers. MoDOT will be an advocate for transportation.



## Advocate for Transportation Issues

### *Percent of minorities and females employed*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Brenda Treadwell-Martin, Equal Opportunity Director

**Purpose of the Measure:**

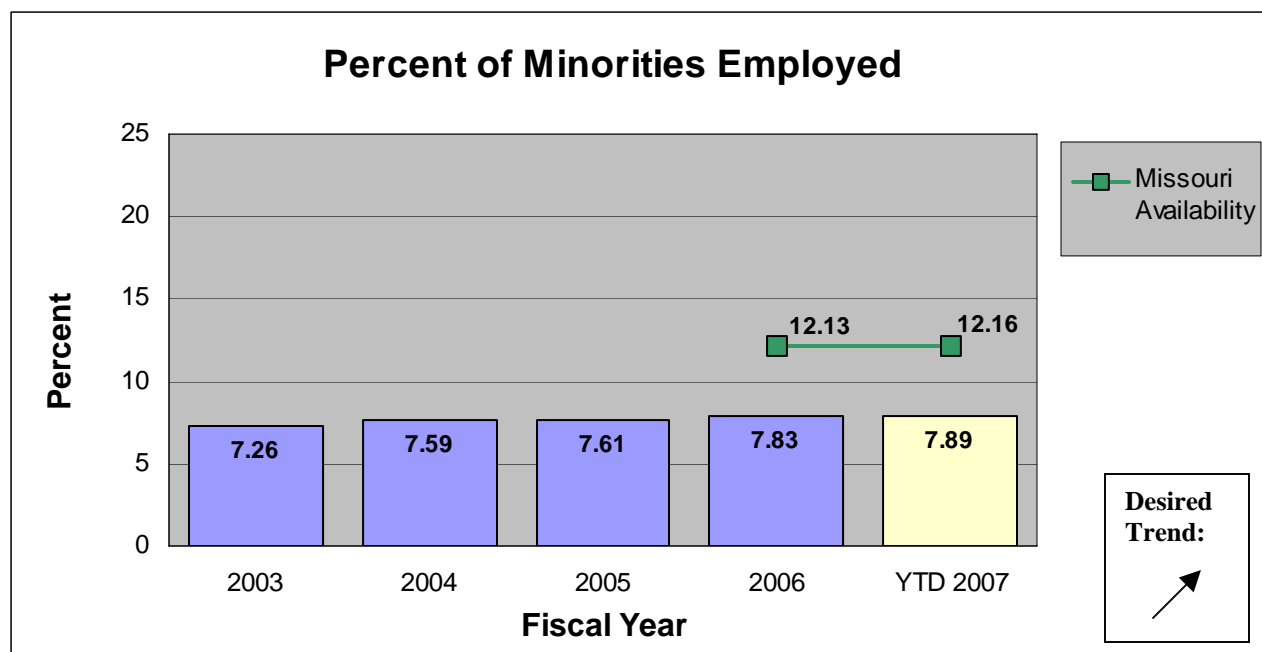
This measure tracks minority and female employment in MoDOT's workforce and availability data from the Missouri 2000 Census report. Efficient use of people resources provides opportunities for the department to leverage transportation resources to available human capital. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to the taxpayers.

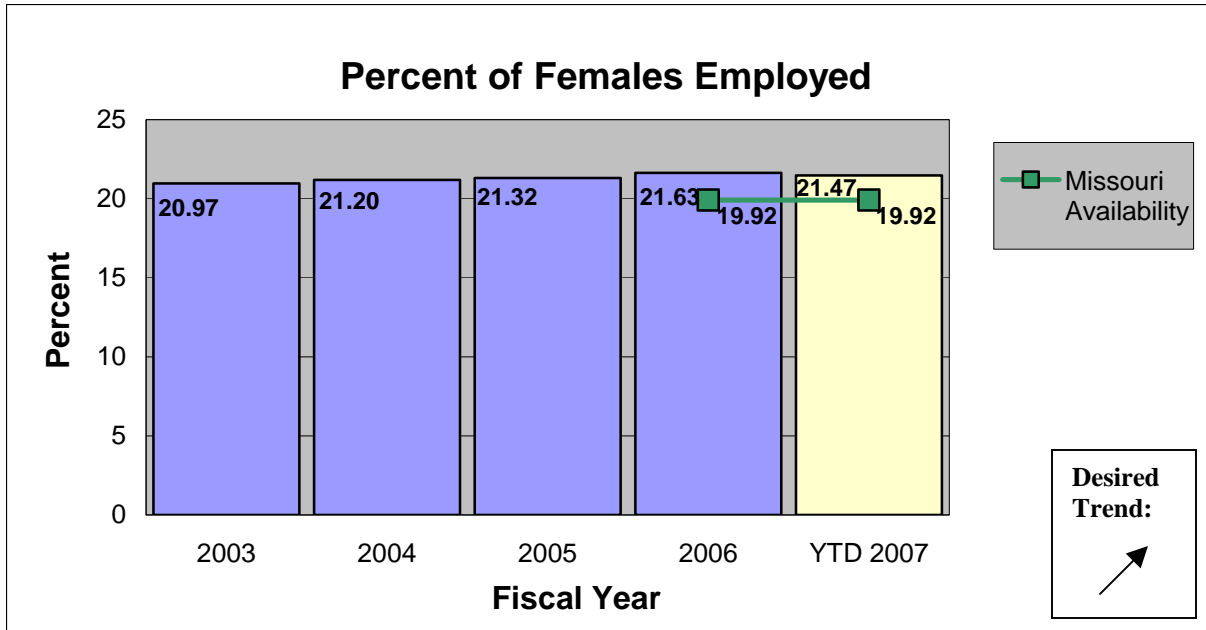
**Measurement and Data Collection:**

MoDOT's Affirmative Action database and Missouri 2000 Census Report are used to collect data. Private sector, departments of transportation, Missouri state agencies, and Missouri 2000 Census Data were researched to determine a benchmark for this measurement. Due to the significant variations for some of these entities (such as pay incentives, number of employees, geographic locations), it was determined Missouri 2000 Census Data, based on jobs used by the department, would be the benchmark for this measurement.

**Improvement Status:**

The employment trend charts below compare MoDOT's minority and female workforce data to Missouri 2000 Census Availability data. During this reporting period, minority employment increased from 497 to 502 or one percent, while female employment decreased from 1,373 to 1,366 or 0.51 percent. Some of the steps taken to improve included: expanding minority contacts to increase applicant pool, developing a statewide diversity message to communicate the importance of embracing and valuing diversity in the workforce, and elevating diversity concepts by conducting diversity workshops in various geographic locations to raise awareness.





## Advocate for Transportation Issues

### *Percent of transportation-related pieces of legislation directly impacted by MoDOT*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Pam Harlan, Senior Governmental Relations Specialist

**Purpose of the Measure:**

This measure tracks the department's impact on the total number of transportation-related bills filed by the General Assembly as well as the department's progress on its own legislative agenda.

**Measurement and Data Collection:**

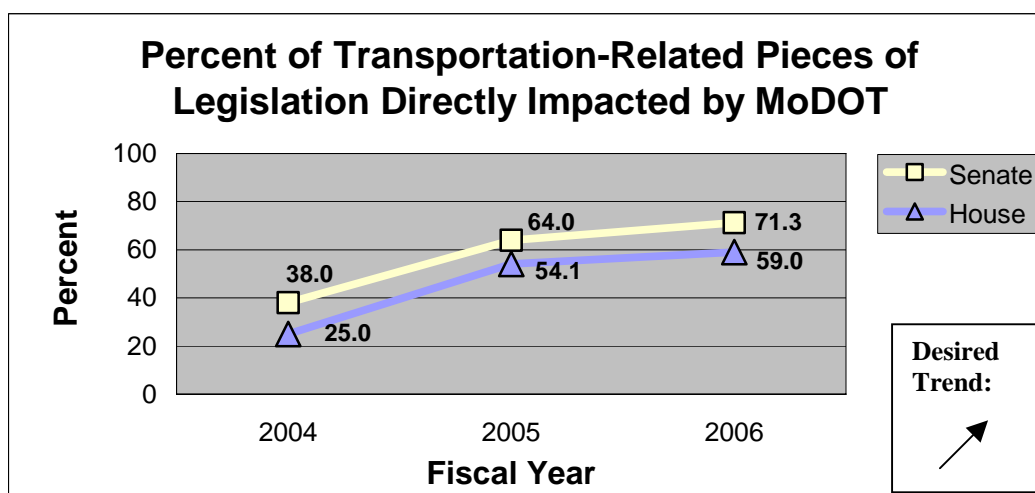
In the summer, data is obtained by reviewing both the Senate and House web sites for legislation in the transportation subject categories. Each bill is reviewed for department impact. A percentage is determined from the total number of bills the department impacted in each category divided by the total number of bills in each category. This percentage of impact is noted on the first chart.

Every fall, potential legislative proposals are submitted to the Missouri Highways and Transportation Commission for their review and approval. The second chart tracks each approved legislative proposal through the legislative process.

**Improvement Status:**

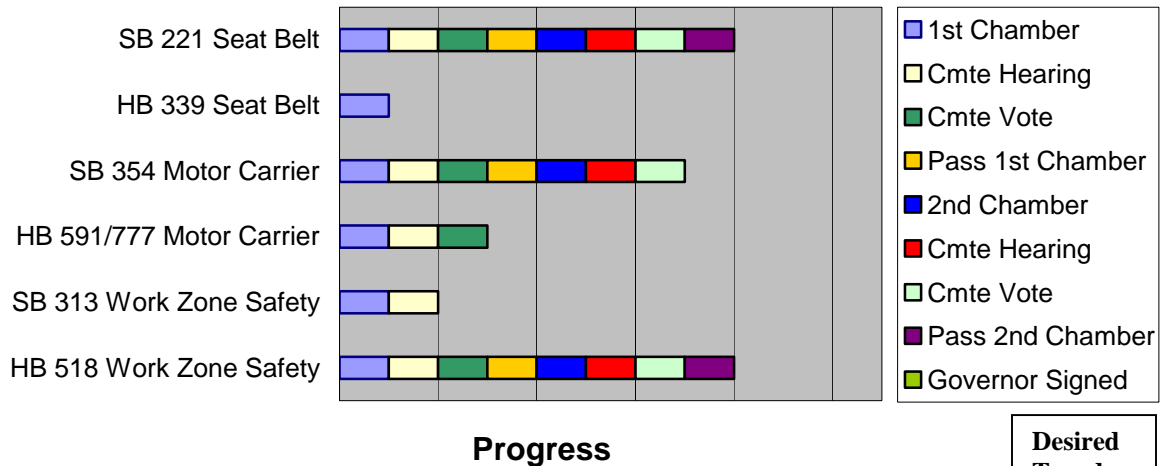
Three of the five approved 2006 MHTC legislative proposals passed. These included public private partnerships, motor carrier registration, and work zone safety. MoDOT has improved in its ability to pass approved legislative proposals from the 2005 to the 2006 legislative session.

This measure also improved, as there was an increased percentage of impact by MoDOT upon all transportation-related bills filed by the General Assembly in 2006. Efforts were focused on the Senate side of the state legislature this year and the numbers of this measure are a reflection of those actions.



**2005 - 93rd General Assembly**

## Progress on MoDOT Legislative Initiatives

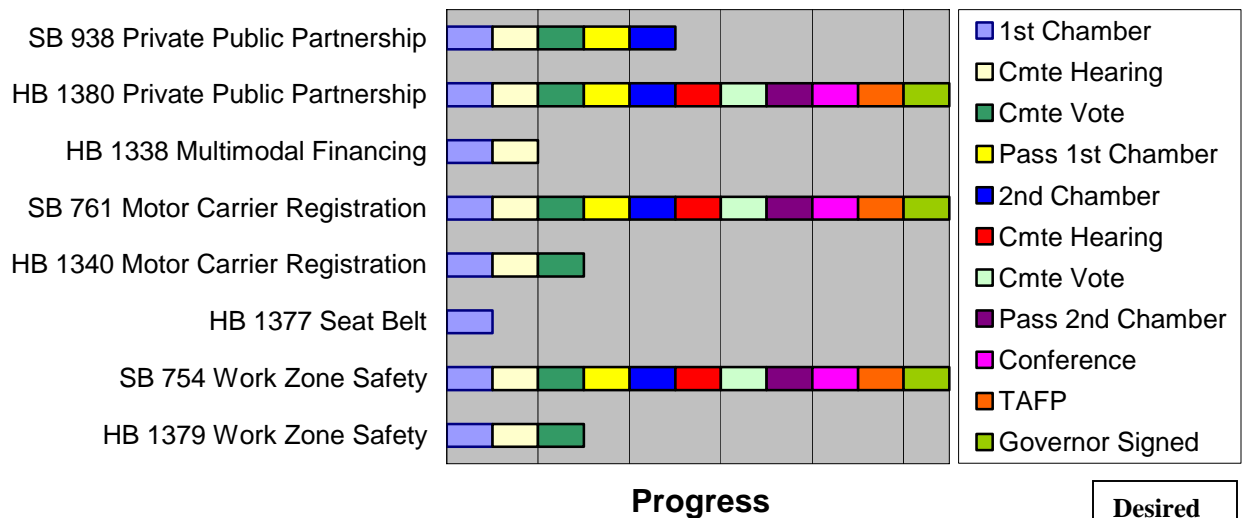


**Desired Trend:**

N/A

**2006 - 93rd General Assembly**

## Progress on MoDOT Legislative Initiatives



**Desired Trend:**

N/A

## Advocate for Transportation Issues

### *Percent of federal roadway earmarked projects on the state highway system*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Kent Van Landuyt, Assistant to the Director

**Purpose of the Measure:**

Missouri's support for transportation on the national level is demonstrated by the impact of federal legislation on Missouri's ability to address transportation needs. The percent of state highway system earmarks that are identified Missouri needs is representative of the department's success as an advocate of the state's transportation needs.

**Measurement and Data Collection:**

The data represents the percent of earmarked roadway projects that are on the state highway system and the percent of state highway system projects that are identified as needs. The percent of individual projects on the state highway system represents the department's success in working with Missouri's Congressional delegation and the percent of state system earmarks that are locations already identified as needs demonstrates that MoDOT has provided adequate information to our Missouri Congressional members that these needs are the same as the needs recognized by their constituents. The identified needs for this measure are projects on the state highway system that are included in the STIP or projects ready to be added to the STIP as soon as funding becomes available.

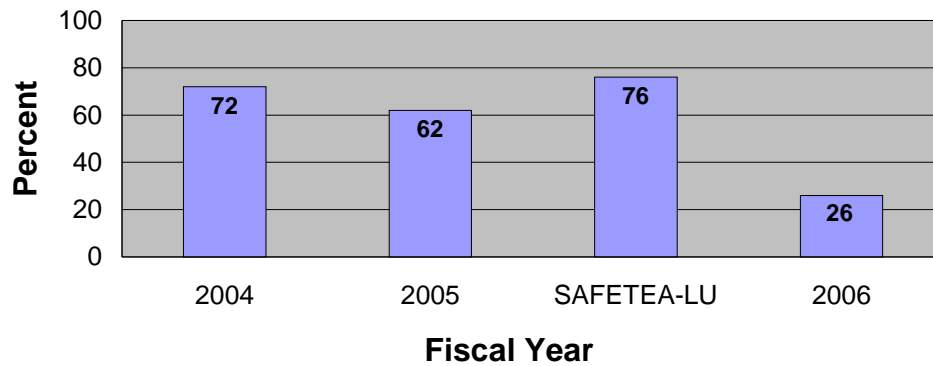
**Improvement Status:**

The first chart shows that Missouri was not as successful in Fiscal Year 2006, as in previous years, in receiving earmarks for state system projects. The second chart shows that the percent of earmarks Missouri received for state system projects identified as needs was not as high as in previous years. The department continues to meet with the staff of each member of Missouri's U. S. Congressional delegation on a regular basis to provide information on transportation issues, urge them to support programs and projects that address Missouri's transportation needs and provide them with information for FY2007 transportation needs. The department continues to provide training activities to inform congressional staff on the federal and state requirements that must be met before a project can be constructed.

The department is striving for more than 75 percent of the earmarked projects to be on the state system and more than 85 percent of the state system earmarked projects to be identified needs. The department continues to communicate directly with congressional staff members to increase the number of earmarked projects that are identified needs on the state transportation system.



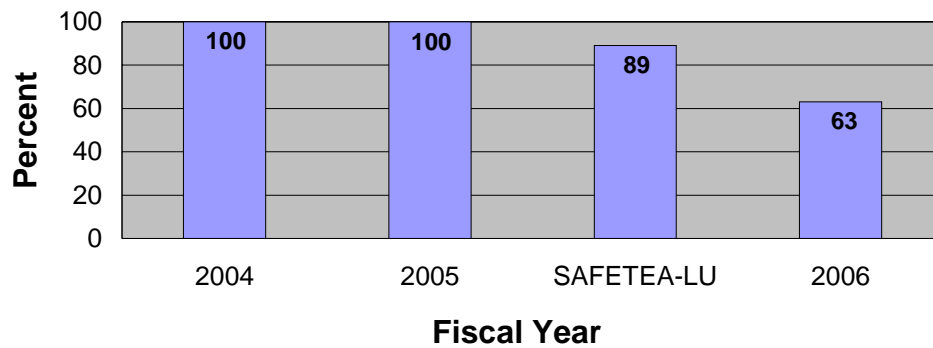
### Percent of Federal Roadway Earmarked Projects on the State Highway System



Desired  
Trend:



### Percent of Federal Roadway Earmarked Projects Identified as Needs



Desired  
Trend:



## Advocate for Transportation Issues

### *Percent of customers who view MoDOT as Missouri's transportation expert*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Jay Wunderlich, Governmental Relations Director

**Purpose of the Measure:**

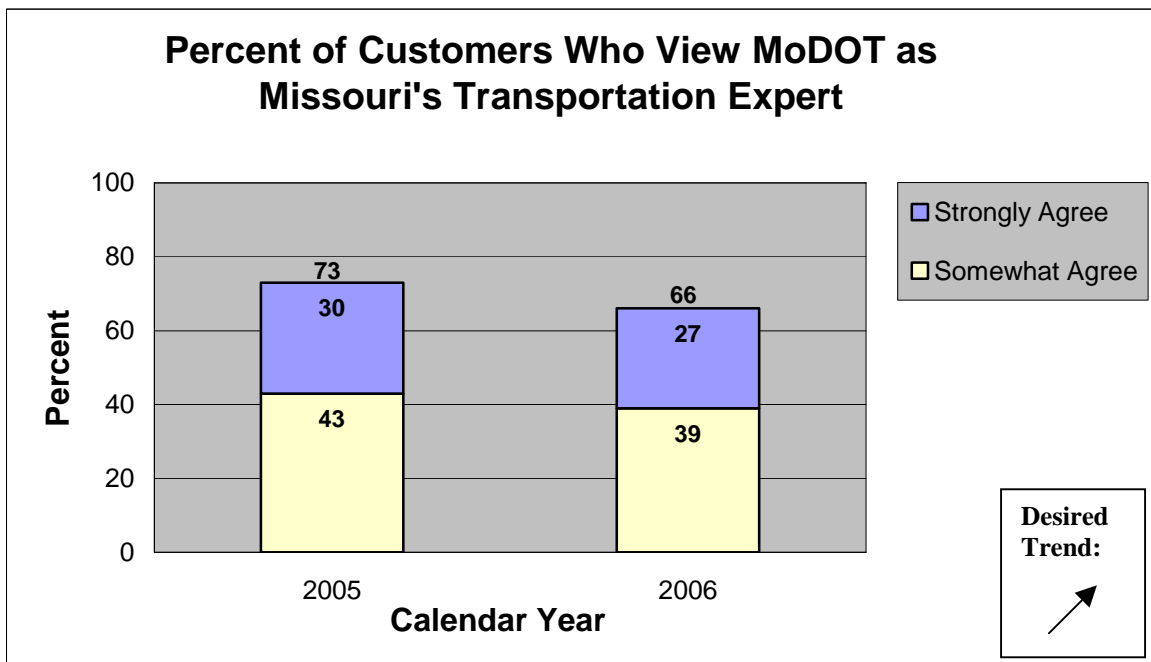
This measure tracks whether our customers feel the department is a leader and expert in transportation issues. The measure will eventually show the department how effectively MoDOT conveys its expertise to the traveling public.

**Measurement and Data Collection:**

The data has been collected in statewide telephone surveys conducted in May 2005 and 2006. The surveys were conducted by Abacus Associates; first through the Missouri Advanced Planning initiative, and then by contract with Missouri Transportation Institute. Each year, MoDOT surveys public opinion to collect information that will tell the department whether or not the public views MoDOT as the primary transportation expert in Missouri.

**Improvement Status:**

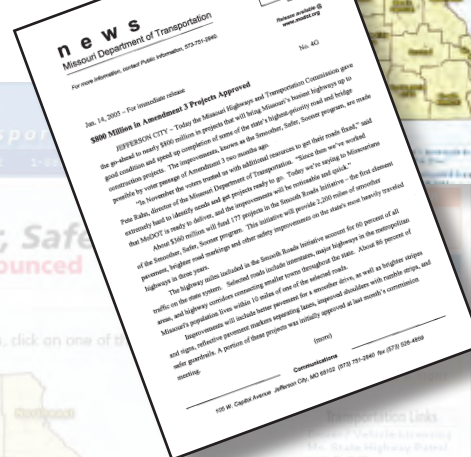
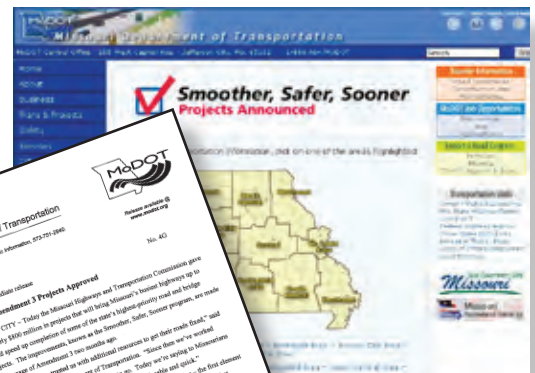
The current information shows that 66 percent of respondents indicate MoDOT is the transportation expert they rely upon. This represents a seven percent reduction in public opinion since last surveyed in 2005. Through an open-ended questioning approach identical to last year's survey, this year's numbers reflect the same percent of individuals who disagreed with this statement also disagreed in the last survey. The number of individuals surveyed that were not sure or refused to answer this question increased seven percent, indicating that citizens may not have a clear definition of what a "transportation expert" means to them. MoDOT must continue to work on improving partnerships with citizens', legislators and special interest groups promoting MoDOT as a transportation expert. Ways to accomplish this include, increasing awareness of MoDOT's responsibilities to and services for the traveling public. Future surveys will further focus on determining the citizens definition and expectations of a "transportation expert" and if MoDOT is perceived as the "transportation expert".



# Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

*Tangible Result Driver – Shane Peck,  
Community Relations Director*

Accurate, consistent and timely information is critical to accomplishing MoDOT's mission. By providing this information to its customers, MoDOT becomes the first and best source for transportation information in Missouri. Openness and honesty build trust with our customers.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of public appearances*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

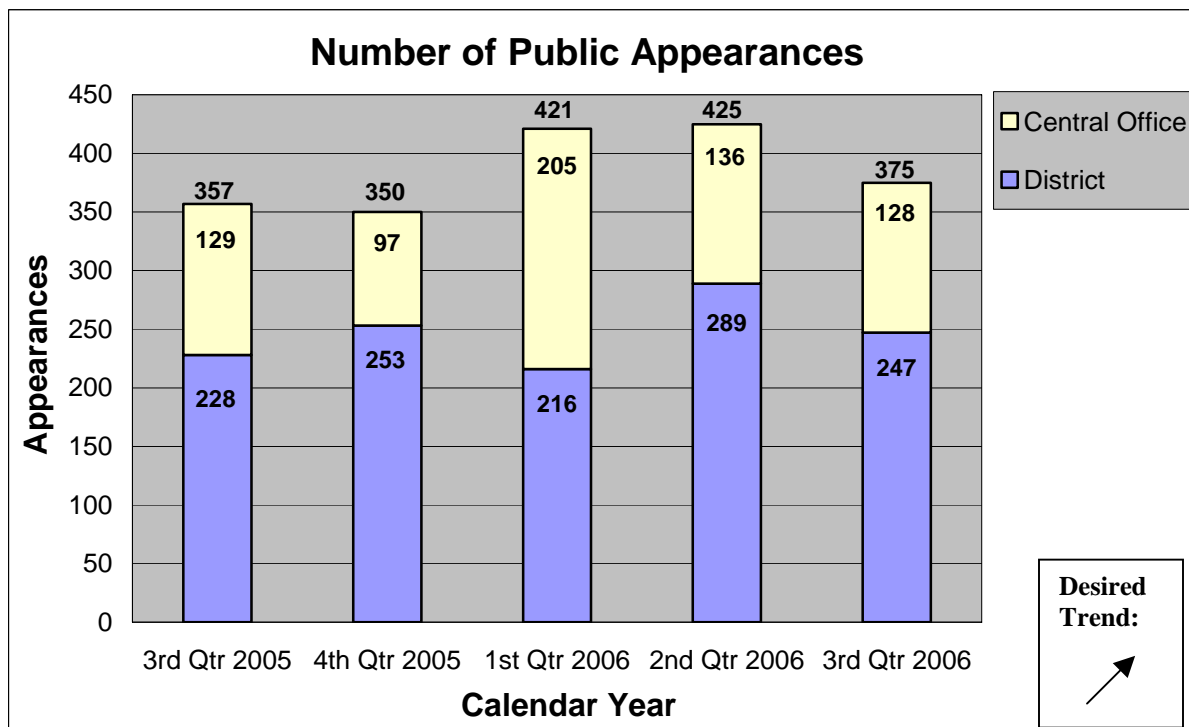
This measure tracks and encourages regular, personal contact with our customers.

**Measurement and Data Collection:**

District Community Relations managers collected appearance information from their administrators and sent it to Central Office Community Relations where it was combined with similar CO data from divisions and business offices to create a statewide report. Data collection began April 1, 2005. The numbers seem to change from quarter to quarter because certain events and other public appearance opportunities are seasonal, such as school visits and fairs.

**Improvement Status:**

MoDOT's districts and Central Office reported a total of 375 public appearances during July, August and September 2006, down slightly from last quarter, but higher than the same period last year. MoDOT staff reached at least 214,000 people through public appearances in the third quarter of 2006 - up from 39,000 last quarter. The 11-day Missouri State Fair in August and our sponsorship of a Mizzou football game in September helped boost those numbers. To establish MoDOT staff as transportation experts and encourage groups and associations to schedule MoDOT speakers for their meetings, we sent more than 400 letters to a wide variety of organizations in October. Community Relations also has created a link on the Web site called "Find An Expert," where individuals can arrange for a MoDOT speaker based on location, topic, etc. Community Relations continues to promote MoDOT speakers through the external e-newsletter, Express Lane.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of customers who feel MoDOT provides timely, accurate and understandable information*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

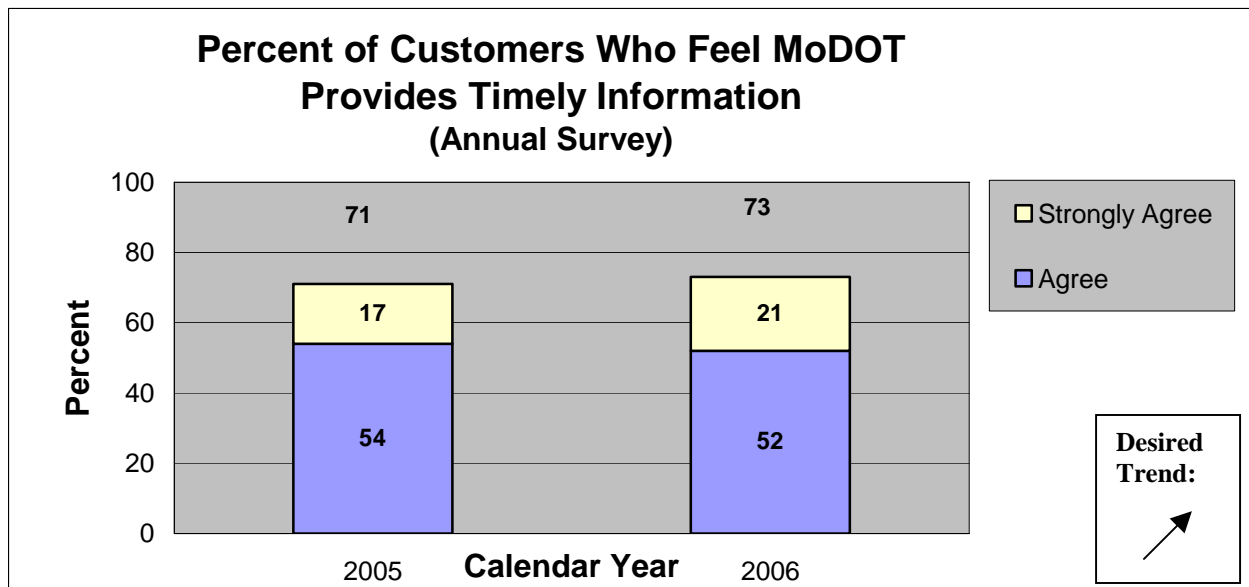
This measure tracks whether customers are comfortable with MoDOT's proactive efforts to provide accurate and understandable information they need and use.

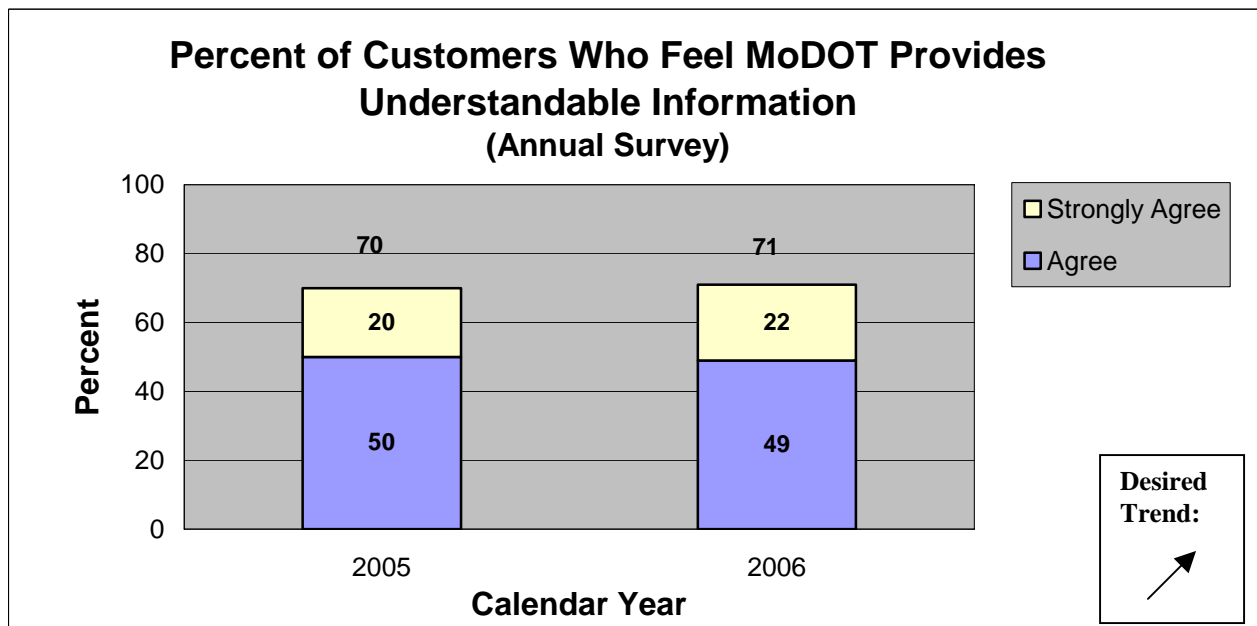
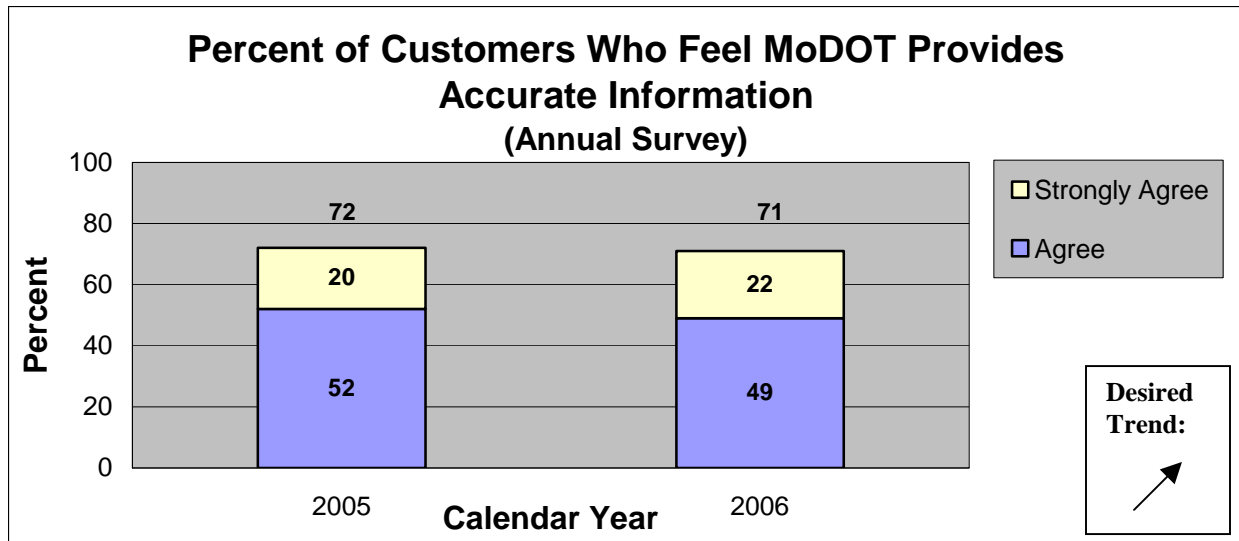
**Measurement and Data Collection:**

Data was collected as part of a study commissioned by the Missouri Transportation Institute in May 2006. The study interviewed 3,500 randomly selected adult Missourians.

**Improvement Status:**

This is an annual measure. New data will not be available until May 2007. During the third quarter of 2006, we continued many of our successful efforts to provide timely, accurate and understandable information to Missourians. These efforts included distributing project information through the Web site, radio advertising, news releases, portable message boards and construction maps. Community Relations also issued news releases, held special events and created Web sites to provide information about new work zone and booster seat legislation affecting Missourians. MoDOT's presence was felt at the 11-day Missouri State Fair in August through educational exhibits on a variety of transportation topics. Community Relations also continues to provide an e-newsletter and e-updates to inform the public of MoDOT activities.





## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of contacts initiated by MoDOT to media*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

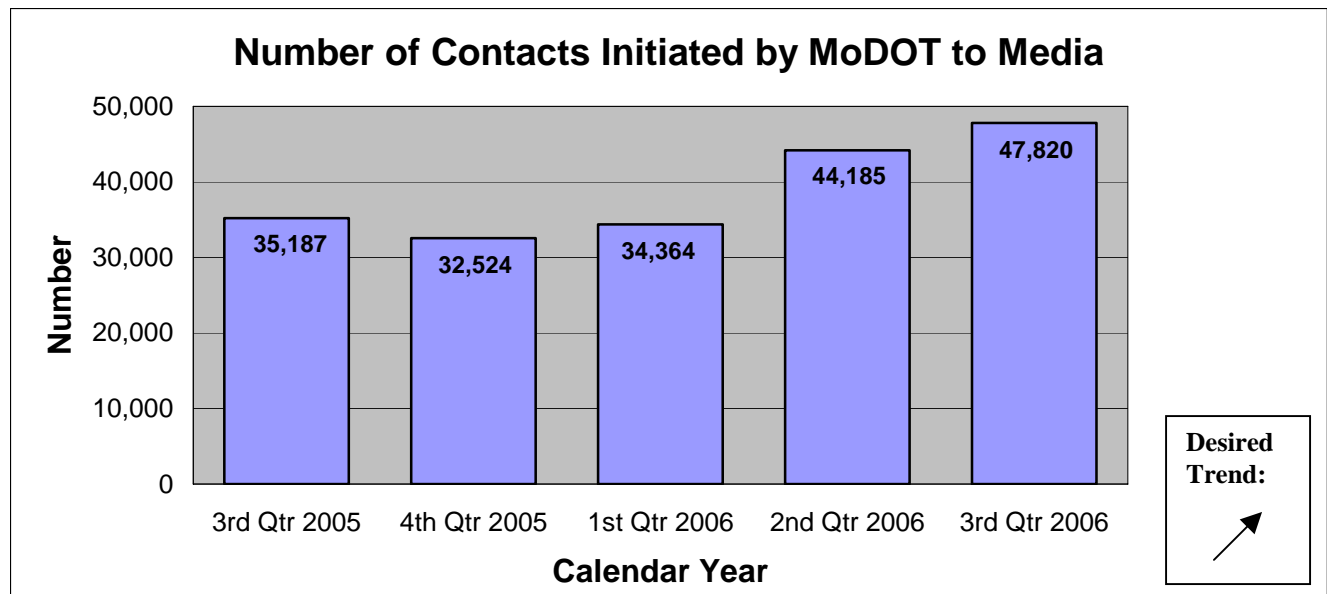
This measure tracks how well MoDOT staff is “reaching out” to reporters to tell them about the good work MoDOT does.

**Measurement and Data Collection:**

All contacts (news releases, e-mail, phone and correspondence) initiated by MoDOT staff are included. Central Office Community Relations collects quarterly results, including submissions from districts.

**Improvement Status:**

Contacts increased 36 percent over this time last year. With MoDOT in the middle of its busiest-ever construction season, as well as the kickoff of the Safe & Sound Program, there was plenty to talk about. Expanded use of electronic updates and other non-traditional media contacts is also driving these numbers up.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of MoDOT information that meets the media's expectations*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

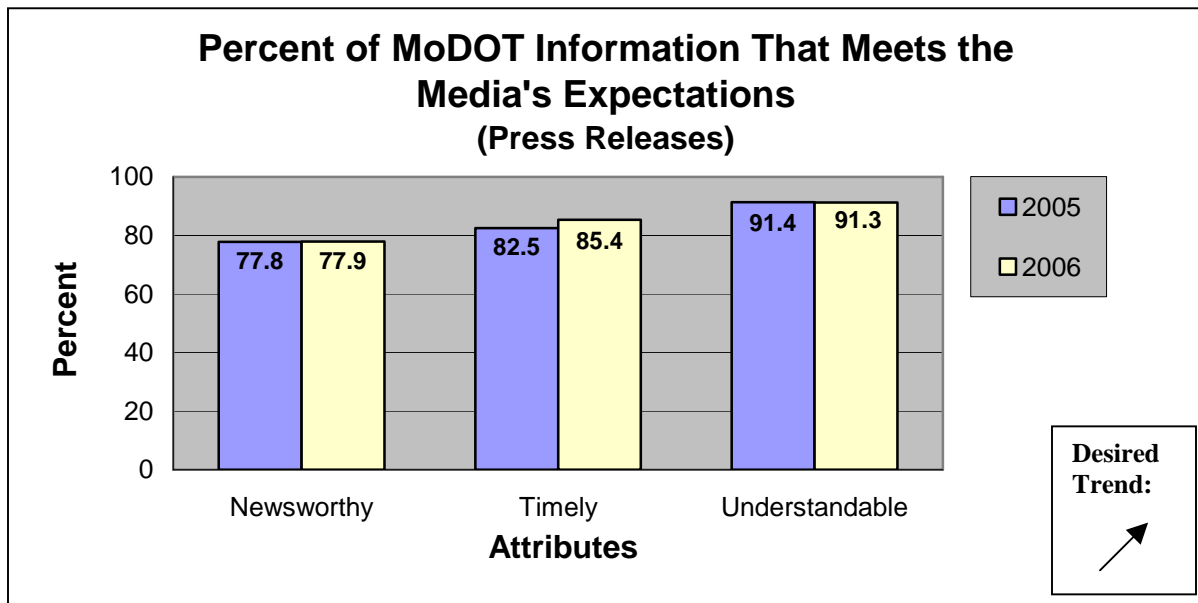
This measure tracks how MoDOT is meeting the media's needs by providing appropriate information.

**Measurement and Data Collection:**

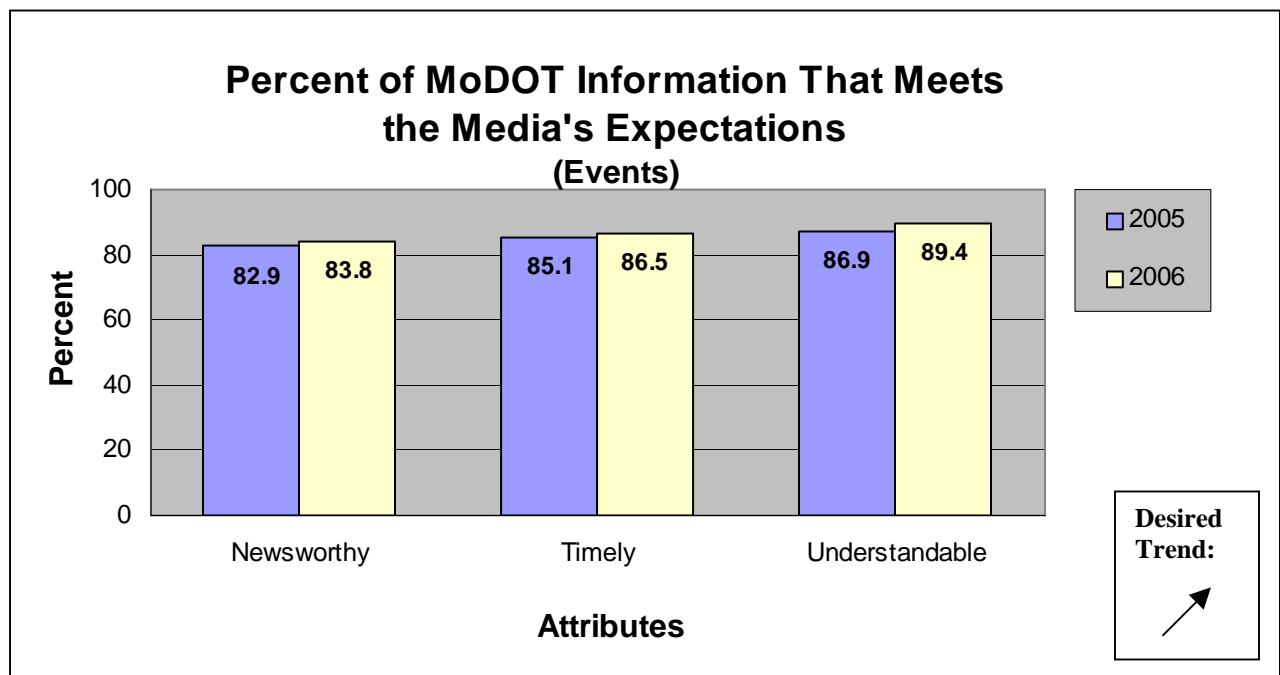
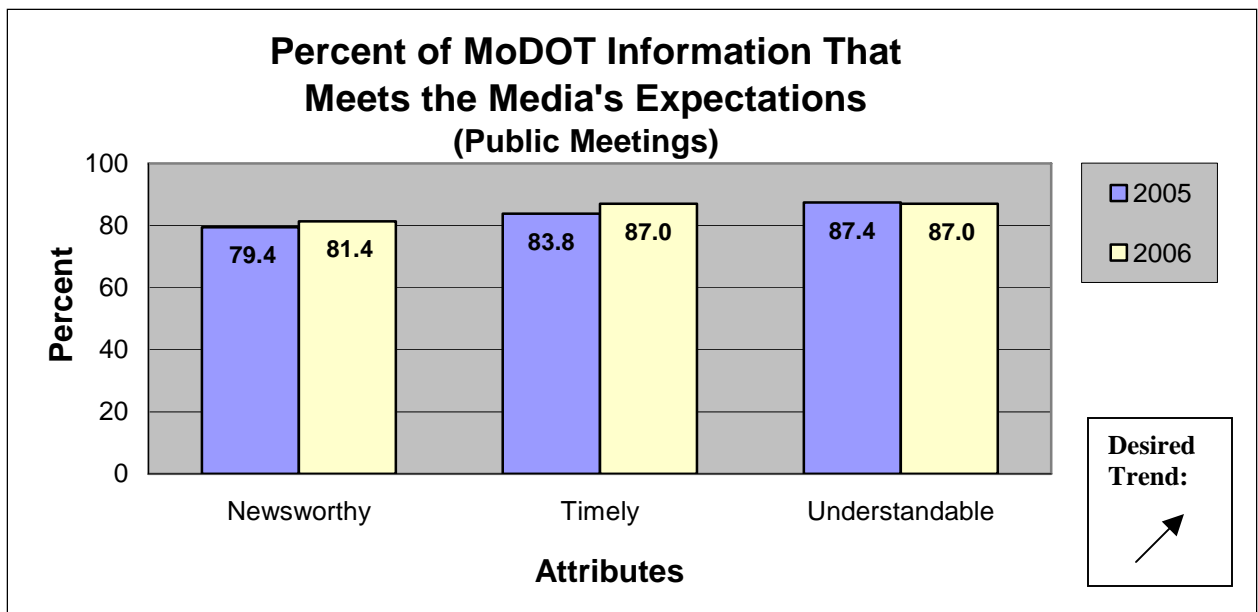
Community Relations sends out surveys asking statewide media if MoDOT's outreach efforts meet their expectations. They are asked to rate their level of satisfaction in the areas of press releases, public meetings and events. Each area is further rated in newsworthiness, timeliness, and how understandable it is.

**Improvement Status:**

There is no new data for this annual measure. The 2006 annual survey was completed in June/July, and showed continuing high numbers along with growth in some areas. Continued emphasis on electronic distribution to improve timeliness as well as newsworthy events such as the Smooth Roads Initiative and Safe & Sound Program improvements should help next year's results.







## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of positive newspaper editorials*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

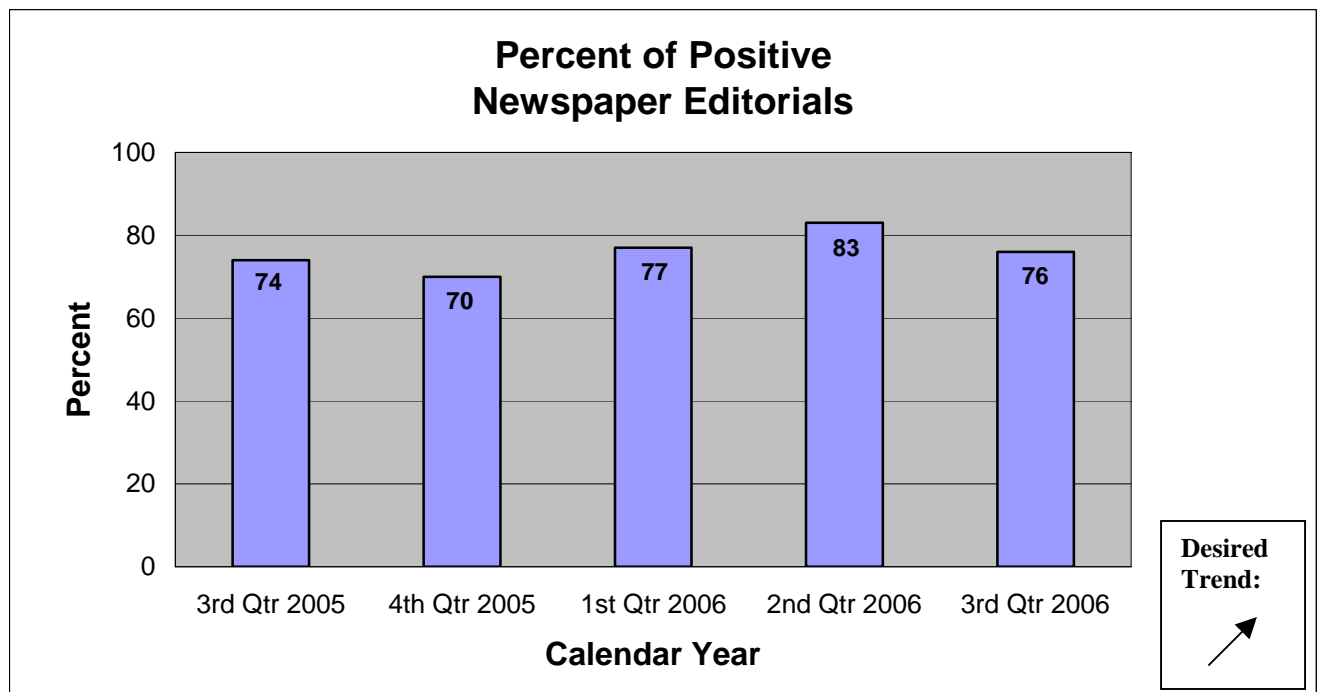
This measure tracks how MoDOT is being perceived by media, and by extension the public.

**Measurement and Data Collection:**

Using a newspaper clips database, Community Relations staff reviews statewide newspaper editorials and determines whether they're positive or negative toward MoDOT and/or the issues it advocates. Only editorials written by newspaper staff are included; guest editorials and letters to the editor are not. Results are charted quarterly.

**Improvement Status:**

The number remains high, though below last quarter, with 35 of 46 editorials positive. Positive editorials supporting seat belt use and booster seats led the way, as well as several urging caution while driving in highway work zones. The Safe & Sound Plan was also very well received. There were several negative editorials related to lack of emphasis on rural roads; others were spread among several isolated issues.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of repeat visitors to MoDOT's web site*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Matt Hiebert, Community Relations Coordinator

**Purpose of the Measure:**

This measure tracks the number of customers who have used MoDOT's web site on a repeat basis. The data helps demonstrate whether the public views the site as a valuable information resource. If they are returning to the site for multiple visits, they probably view it as a worthwhile use of their time online.

**Measurement and Data Collection:**

Data is gathered using Web Trends software. Web Trends measures site activity and produces reports in graphic and tabular formats.

**Improvement Status:**

The upward trend from last year's figures continues. Increases in the third quarter of 2006 range from 21 percent for September to 29 percent for August. As with previous years, web traffic declined in September. This is largely due to a decrease in highway travel. Adding and promoting new content, and analyzing and responding to the measurable results, continues to be the primary means of increasing repeat visitors.

